

19980330.qrp v01_n045.qrs.980330

Date: Mon, 30 Mar 1998 19:03:24 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1045

QRP-L Digest 1045

Topics covered in this issue include:

- 1) [7147] Re: Solomon Islands na tok tok DX long contest . . .
by nilsbull@juno.com (Nils R Young)
- 2) [7148] WIN A HOLIDAY!
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- 3) [7149] Re: virus alert
by "Tim, KD5CKP" <PROG922@worldnet.att.net>
- 4) [7150] Re: Pblm with Sierra 15m module...
by "Hugo W. Catta" <catta@ibm.net>
- 5) [7151] Re: WIN A HOLIDAY!
by Roger Braker <msebrakr@telepath.com>
- 6) [7152] Re: Pblm with Sierra 15m module...
by marion@montana.com
- 7) [7153] 2N2 "CONTACT"
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 8) [7154] Lead Bending
by gsurrency@juno.com (Gary L Surrency)
- 9) [7155] Re: SSB QRP - MFJ9420 CW adapter
by "KA5T Larry Wise" <lewise@inetport.com>
- 10) [7156] Re: Pblm with Sierra 15m module...
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 11) [7157] Re: Elmer101: parts ID
by Rick McNelly <72507.235@compuserve.com>
- 12) [7158] Re: QRPTTF, Border Ops
by Joe Gervais <vole@primenet.com>
- 13) [7159] Kit fun??? TWO 15m Sierra modules in a day!
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 14) [7160] Re: SSB QRP - MFJ9420 CW adapter
by Monte Stark <ku7y@dri.edu>
- 15) [7161] 38 Special "It Works!"
by Kevin Walker <KB9NUN@compuserve.com>
- 16) [7162] Re: [Fwd: Virus Alert]
by Mike - W0TMW <crucis@sky.net>
- 17) [7163] Re: Solomon Islands na tok tok DX long contest . . .
by Monte Stark <ku7y@dri.edu>
- 18) [7164] Re: More leadbending
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 19) [7165] FORTH

- by Charles Kadesch <chas@digizen.net>
- 20) [7166] Epiphyte Confusion!
by "John D. Spittle" <jds@vcn.bc.ca>
- 21) [7167] MD hamfest, second report
by mike czuhajewski <wa8mcq@abs.net>
- 22) [7168] Re: WIN A HOLIDAY!
by "John J. McDonough" <jjmcd@mdn.net>
- 23) [7169] QRPTTF
by marion@montana.com
- 24) [7170] Re: Battery chargers
by "S. Lee" <slee@u.washington.edu>
- 25) [7171] 10-meter beam wanted
by Vic Rosenthal <rakefet@rakefet.com>
- 26) [7172] Re: Portland Electronics Suppliers?
by "S. Lee" <slee@u.washington.edu>
- 27) [7173] Gary Diana At Round Table Pizza Report
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 28) [7174] Re: Pblm with Sierra 15m module...
by talljazz@teleport.com (Dan Presley)
- 29) [7175] Argonauts explained?
by aa5yx@juno.com (John F. Harper)
- 30) [7176] Re: Pblm with Sierra 15m module...
by marion@montana.com
- 31) [7177] 2N2222: Final amp efficiency?
by Stephen Trier <sct@po.cwru.edu>
- 32) [7178] FOR SALE: Ten Tec Argonaut 505 QRP CW/SSB Transceiver & Pwr Sup
by "Dick Schneider" <rschneid@ix.netcom.com>
- 33) [7179] FOR SALE: HW9 CW QRP Transceiver w/ps
by "Dick Schneider" <rschneid@ix.netcom.com>
- 34) [7180] Re: Battery chargers for GEL batteries
by LYN <designserv@ipass.net>
- 35) [7181] Walking Stick Antennas
by John Mckee <JMckee@RFMD.com>
- 36) [7182] Ten Tec Meter Kit
by "Jeff M. Gold" <JGold@tnitech.edu>
- 37) [7183] RE: Another N/T+ fox makes Advanced
by "Buck, Preston D" <BuckPD@corning.com>
- 38) [7184] Viruses and backups
by John Evans - N0HJ <jaevans@codenet.net>
- 39) [7185] Knightlights trip to CORE BANKS
by LYN <designserv@ipass.net>
- 40) [7186] QRP Dayton events make Amateur Radio Newsline!!!
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 41) [7187] Tower Help please.
by "ukii" <ukii@megsinet.net>
- 42) [7188] Re: Battery chargers for GEL batteries
by Monte Stark <ku7y@dri.edu>
- 43) [7189] Kent paddle tuneup?

by Paul Erickson <paul1@wizard.ucsf.edu>
44) [7190] Anyone know when/if there's a Dayton QRP forum?
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
45) [7191] QRP A>T>U and SWR Bridges
by Fred Lesnick <flesnick@Quetico.tbaytel.net>
46) [7192] Crummy hook-up wire
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
47) [7193] Re: Tower Help please.
by "Bruce Barley" <lbbbarley@feist.com>
48) [7194] shipping method?
by Roger Braker <msebrakr@telepath.com>
49) [7195] Re: QRPTTF
by Zack Lau <zlau@arrl.org>
50) [7196] Re[2]: Mobile Interference
by eakwik@mail.hac.com
51) [7197] Re: Tower Help please.
by "George T. Baker" <w5yr@swbell.net>
52) [7198] Re: R-2 Front End Comments and Suggestions
by "Adam B. Kanis" <adam-kanis@uiowa.edu>
53) [7199] Re: Tower Help please.
by LYN <designserv@ipass.net>
54) [7200] Re: Grounding dipole
by LYN <designserv@ipass.net>
55) [7201] Grounding antennas
by B11john <B11john@aol.com>
56) [7202] Re: Grounding dipole
by LYN <designserv@ipass.net>
57) [7203] Happy dance (WIN NT / WIN 98 / Internet Connections)
by Ed Tanton <n4xy@att.net>
58) [7204] elmer 101:parts list
by Roger Braker <msebrakr@telepath.com>
59) [7205] New Question
by Brad Mugleston <bmug@gwl.com>
60) [7206] DSPs: The great A/B test
by "Allan G. Taylor" <ataylor@heracles.llnl.gov>
61) [7207] CQ YV-OPS
by jdougher <jdougher@wt.net>
62) [7208] Re: Ten Tec Meter Kit
by "Steve Sorrell" <ap036@detroit.freenet.org>
63) [7209] More Gel Cells
by eakwik@mail.hac.com
64) [7210] SW-40+ Schematic Update
by adams@chuck.dallas.sgi.com (Chuck Adams)
65) [7211] gel-cell chargers (Chuck Adams)
by Wayne Glover <wayneg@ci.ogden.ut.us>
66) [7212] Re: Grounding a Dipole
by Tellefsen Bob-CNSE97 <cns97@lmpsil02.comm.mot.com>
67) [7213] [Fwd: gel-cell chargers (Chuck Adams)]

- by Wayne Glover <wayneg@ci.ogden.ut.us>
- 68) [7214] RE: Grounding antennas
by Kevin Muenzler--WB5RUE <wb5rue@stic.net>
- 69) [7215] On FORTH (LONG, NON-QRP, Computer Programming)
by KC5TJA <kc5tja@topaz.axisinternet.com>
- 70) [7216] Re: Grounding antennas
by mwattcpa@earthlink.net (Marty Watt)
- 71) [7217] WQ4RP GO GETEM
by Jay Bromley <w5jay@alltel.net>
- 72) [7218] Re: Battery chargers
by Mike - W0TMW <crucis@sky.net>
- 73) [7219] RS Frequency Counter Wanted
by Larry East <w1hue@amsat.org>
- 74) [7220] SW40+ diagram
by "Ted Beach" <k4mkx@hotmail.com>
- 75) [7221] FOXHUNT Scores to Follow
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 76) [7222] 1998 FOXHUNT SCORES G/A/E
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 77) [7223] Hunter Count in FOXHUNT
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 78) [7224] TenTec kits
by "Steve" <steve@pell.net>
- 79) [7225] RE: Grounding antennas
by Kevin Muenzler--WB5RUE <wb5rue@stic.net>
- 80) [7226] New Webb Page
by John Anthony Reynolds <D2250077@infotrade.co.uk>
- 81) [7227] RE: Grounding antennas
by Kevin Bunin <p014455b@pb.seflin.org>
- 82) [7228] New Product, Hi-Mound MK-8 Paddle (finally!)
by "Marshall Emm" <mgemm@mtechnologies.com>
- 83) [7229] RE: Grounding antennas
by Kevin Muenzler--WB5RUE <wb5rue@stic.net>
- 84) [7230] MK8 Price (Forestalling Phone Calls)
by "Marshall Emm" <mgemm@mtechnologies.com>
- 85) [7231] Insulated Antenna Wires
by FrConrad <FrConrad@aol.com>
- 86) [7232] Re: MK8 Price (Forestalling Phone Calls)
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 87) [7233] Elmer101
by Brad Mugleston <bmug@gwl.com>
- 88) [7234] Re: Insulated Antenna Wires
by "Tim, KD5CKP" <Prog922@worldnet.att.net>
- 89) [7235] Ant question: 40m dipole fed w/ twin lead won't tune
by "Buck, Preston D" <BuckPD@corning.com>
- 90) [7236] Delving the Degree of Dit Dropping
by FrConrad <FrConrad@aol.com>
- 91) [7237] QRP DX OBSERVATION

- by cjsterl@ix.netcom.com
- 92) [7238] Re: Insulated Antenna Wires
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 93) [7239] 1998 Fox Scores
by ab5uacw@juno.com (Clifton W Sikes)
- 94) [7240] NN1G, WJ2V, and K5FO SW-40+
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 95) [7241] RE: Insulated Antenna Wires
by Kevin Muenzler--WB5RUE <wb5rue@stic.net>
- 96) [7242] Re: Ant question: 40m dipole fed w/ twin lead won't tune
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 97) [7243] Antenna Design!
by "James Fielden" <fielden@utkux.utcc.utk.edu>
- 98) [7244] Please help
by Roger Braker <msebrakr@telepath.com>
- 99) [7245] Re: QRP DX OBSERVATION
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 100) [7246] Re: Pblm with Sierra 15m module...
by talljazz@teleport.com (Dan Presley)
- 101) [7247] Re: QRP DX OBSERVATION
by Monte Stark <ku7y@dri.edu>

Date: Sun, 29 Mar 1998 19:10:55 -0500
From: nilsbull@juno.com (Nils R Young)
To: cstack@safelink.net
Cc: qrp-l@Lehigh.EDU
Subject: [7147] Re: Solomon Islands na tok tok DX long contest . . .
Message-ID: <19980329.191056.12582.3.nilsbull@juno.com>

Salam wantok!

Sampela man i kisim biktaim DX long SSB long contest. Em mi laikim tu.
Trabil bilong mi tasol long dispela haus gutpela antenna i no gat.
Wantaim longbak papa bilong mi em i paitim long war long Guadalcanal na
Bougainville. So mi laikim wantaim tok tok long narapela radio amateur
long em tupela ailan. Em i mekim mi hapiman biktaim!

Some folks get all the good DX in SSB contests. I'd like that too. Only
trouble is the lack of antennas around here. A long time ago, Dad served
on the Solomons. So I'd enjoy some day talking to another radio loonie on
those islands. Make me happy man bigtime!

73
Nils

Nils R. Bull Young
La Estancia de los Guajolotes Sonrientes :: The Grinnin' Turkey Ranch
WB8IJN &c :: The Tagalong Press :: email to: nilsbull@juno.com
<http://www.geocities.com/Athens/Olympus/9172>

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sun, 29 Mar 1998 16:04:12 -0800 (PST)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Chuck and Michele Snyder <csnyder@nextdim.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7148] WIN A HOLIDAY!
Message-ID: <Pine.LNX.3.96.980329155349.23635A-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Unfortunately, things like this are a total hoax. ASCII-formatted data, such as e-mail, cannot, nor will they ever, hold viruses[1]. Only executable file attachments, such as ActiveX components, .COM, or .EXE-extension file, can contain viruses. In which case, you had better understand the risks of opening such files before you open them anyway.

Just letting everyone know...

Note 1:

If you pass all of your e-mail through a mail filter, made using the Forth programming language, *AND* you allow that filter to execute Forth-code from the mail, *AND* the malicious user knew the wordsets used for your mail filter, *AND* if his processor architecture matches yours, *AND* if his Forth environment's assembler has the same syntax as yours, *AND* you even HAVE an assembler in your Forth system, THEN you could become infected. But considering the above points are listed in descending order of probability, I'd still say you were pretty safe from so-called "mail viruses." Note that less 1% of PROGRAMMERS are aware of the Forth programming language, let alone the rest of the Internet users, so that's a mighty low probability... :-)

=====
KC5TJA/6 |
DM13 |

 -| TEAM DOLPHIN |-
 Samuel A. Falvo II

QRP-L #1447 |

Chief Architect and Project Founder

Date: Sun, 29 Mar 1998 18:17:36 -0600
From: "Tim, KD5CKP" <PROG922@worldnet.att.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7149] Re: virus alert
Message-ID: <351EE4A0.B0E@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

In addition if you receive a warning of a virus you can check it out here <http://www.nai.com/services/support/hoax/hoax.asp>.

Chuck and Michele Snyder wrote:

>
> Hi Gang,
>
> I just wanted to add this advice: that a virus cannot affect
> anything on your computer system when the so called text file is
> supposedly the malicious virus. It must be appended to some program or
> opened by some other program. So, that prior message maybe wasted
> bandwidth...SORRY!
>
> --
> Chuck Snyder (KD7BBF)
> <http://www.nextdim.com/users/csnyder/index.htm>
> QRP-L #1462
> Spokane, WA

--
Tim, KD5CKP
QRP-L #1510
<http://home.att.net/~prog922>

Date: Sun, 29 Mar 1998 19:50:27 -0500
From: "Hugo W. Catta" <catta@ibm.net>
To: gaston1@ibm.net
Cc: frank001@postoffice.worldnet.att.net, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7150] Re: Pblm with Sierra 15m module...

Message-ID: <351EEC53.F39F2119@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> Frank wrote:
>
> > Scott Rosenfeld [NF3I] wrote:
> > >
> > > Am building. Have wound all toroids as required.
> > >
> > > Re-checked six times.
> > >
> > > RX is great (can be peaked nicely).
> > >
> > > Can't push power out on either of 2 Sierras (except when I DROP the drive
> > > considerably). Either two Sierrae are screwed up (built by different
> > > people at different times & locales) or this module is.
> > >
> > > TX/RX Lowpass filter is working, I think.
> > >
> > > On a scope I do get 50 mV p-p of around 21 MHz.
> > >
> > > Doesn't want to get amplified.
> > >
> > > Any ideas? I'm looking for yet another Sierra or a BUILT 15m module to
> > > compare this one with.
> > >
> > > Frustrating. Anyone come up with similar problems? Solutions?
> > >
> > > * Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
> > > * 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
> > > * <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
> > > *** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***
> > >
> > I found the tuning VERY peaky on this module and the 10 m module.
> > No power out unless the two tuning caps were very close to the proper
> > setting. I just adjusted them in small increments until I started to see
> > some output power. Again the setting is very critical.
>
> It sure is. In mine, I had to use an extension for the tuning tool (the yellow
> one plus the red tube, if you use the set sold by R.S.) and only then, with my
> hand at about 8 inches over the rig, could peak to 1.3W and stayed there after
> pulling away the hand.
> This experience makes me think twice before ordering the 12 and 10 mts.
> modules.

>
> Frank;
> You mentioned only 10 meters as the other "peaky" band. Have you had any
> experience with the 12 meters module? If so, I'd like very much to know the
> general behavior of the rig in 12.
> Thank You.
>
> 73,
>
> Hugo
> CX9AAK/W2

Date: Sun, 29 Mar 1998 19:54:22
From: Roger Braker <msebrakr@telepath.com>
To: kc5tja@topaz.axisinternet.com
Cc: qrp-l@Lehigh.EDU
Subject: [7151] Re: WIN A HOLIDAY!
Message-ID: <3.0.1.16.19980329195422.39a7ae80@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

What is the "Forth" programming language? Any web sites I can read about
it? Thanks.

73,
Arnold kd5ckh
At 04:04 PM 3/29/98 -0800, you wrote:
(SNIP) Note that less 1% of PROGRAMMERS are aware of the Forth
>programming language, let alone the rest of the Internet users, so that's
>a mighty low probability... :-)

>
>=====

> KC5TJA/6		> - TEAM DOLPHIN -
> DM13		> Samuel A. Falvo II
> QRP-L #1447		> Chief Architect and Project Founder

>
>
>
>

Date: Sun, 29 Mar 1998 19:10:22 -0700 (MST)
From: marion@montana.com
To: qrp-l@Lehigh.EDU
Subject: [7152] Re: Pblm with Sierra 15m module...
Message-ID: <199803300210.TAA26972@paw.montana.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 06:21 PM 3/29/98 -0500, you wrote:

>Am building. Have wound all toroids as required.

>

>Re-checked six times.

>

>RX is great (can be peaked nicely).

>

>Can't push power out on either of 2 Sierras (except when I DROP the drive
>considerably). Either two Sierrae are screwed up (built by different
>people at different times & locales) or this module is.

>

>TX/RX Lowpass filter is working, I think.

>

>On a scope I do get 50 mV p-p of around 21 MHz.

>

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>

>Any ideas? I'm looking for yet another Sierra or a BUILT 15m module to
>compare this one with.

>

>Frustrating. Anyone come up with similar problems? Solutions?

>

>* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
>* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
>* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
>*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

>

>

>

> I had problems with fifteen and the ten mtr module. The variable
caps were so touchy that even after I got it alinged, just removing and
reinserting would result no power, and realignment neccesary.
I solved by carefully tuning, then carefully unsoldering C33 and replacing
with small value variable of same style(mouser) 6pf npo , in parallel with
npo ceramic at C32 that equaled value of original C33. Example: original C33
tuned at 26pf so 26pf-3pf(have of value new C33 value, so you have tweaking
range) equals 23pf. So tacked on a 22pfnpo ceramic to try. That worked, so I

repeated with C35 C36 pair. C33 and C36 seemed to be the most troublesome pair on both modules. They all had different pf values, so I had to deal with each pair with a little experimentation. Also replaced a couple of other touchy caps on various modules by same method. Just got the 12mtr module, and modifying it from the start. Solid operation now. 72 Roy, AB7CE

Date: Sun, 29 Mar 1998 20:23:41 -0500
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>
To: qrp-l@Lehigh.EDU
Subject: [7153] 2N2 "CONTACT"
Message-ID: <3.0.1.16.19980329202341.42173648@mail49.mci2000.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Well I hope the title caught the attention of at least a few on the list. I finished the 2N2 rig this morning, fired it up on the 'ol long wire, and made 4 quick contacts with it. It works GREAT!

When we last visited the design, I had the receiver working and passed along its configuration. Since that time, I designed, modelled, and built the transmitter portion. Here is that rundown:

Tx local oscillator is another Colpitts crystal configuration, just like the receiver. It is being mixed with the VFO in a single balanced mixer using 1N4148 diodes; the same kind used in the Rx DBM. Following the mixer is a tuned input, tuned output, 2 transistor cascode amplifier using a common emitter/common base configuration. Gain is about +30dB. This amplifier is followed by a class A r.f. amplifier/driver using the first of the metal case 2N2222s. This stage has about +10 dB of gain. The final, is an array of three 2N2222s each running with a bypassed emitter resistor for current balance among the 3 devices. This stage is running class C, and put out a cool 2+ watts on the 12 volt gel cell, and 2.5 watts on the 13.8 volt power supply. I don't have the heat sinks on the driver, nor the finals, so don't really know how far I can push the power up. Two watts seems to make contacts with relative ease. Total transistor count for the transmitter is seven (7) 2N2222s.

Along with the twelve (12) 2N2222s in the receiver, brings the

total count up to nineteen devices used so far.

Now comes the good part! It takes 2 more 2N2222s to do the transmitter keying, and another one to do the receiver muting, and voila, the final count is twenty-two (22) 2N2222s, to do a complete, QSK, 40 meter CW transceiver. Wayne, N6KR had it figured out right on the money! I'm sure it wasn't a "chance" or "ballpark" number.

With the rig working, its time to do the final stage and design some kind of nifty packaging; not something that I feel I can do as well as others. Gotta get creative here. This is what the judges first see. Yipes! They may not even fire the rig up to verify that it works!

What a neat project this has been so far. My XYL made the observation, as the slab of printed circuit board material was being populated circuit after circuit, stage by stage, that it looked like a miniature city being constructed! As I thought about it, it was a rather profound observation, and an excellent analogy.

Keep tuned.....I have most of the schematics drawn, and should have them available for scrutiny in a few more weeks. Can't give out too many details before Dayton though..... :-)

72 and CU all on 40 QRP, now that I finally have a rig.

Jim

```
Jim Kortge, K8IQY (ex NU8N) | NorCal, QRP-L
jokortge@mci2000.com | __o H.F. bicycle mobile
Fenton, MI | _`\<, Mizuho 17/40 SSB
... .. (*)/(*) . . . .
NorCal 38S/30 Log - 34 States; 40 Countries - Running 3 watts
Most recent - Iowa Mauritius

NorCal 38S/17 Log - 22 States; 51 Countries - Running 1.5 watts
Most recent - Alaska Ecuador
```

Date: Sun, 29 Mar 1998 18:34:04 -0700

From: gsurrency@juno.com (Gary L Surrency)
To: qrp-l@Lehigh.EDU
Subject: [7154] Lead Bending
Message-ID: <19980329.183405.3470.1.gsurrency@juno.com>

Dennis, NX5W wrote:

>When leads are bent too short or long to match
>circuit board hole spacing small shavings of tin or lead material can be
>scraped off the leads as they are pulled through the holes.

This is very true. And if these shavings creep under IC's or sockets,
you'll pull you hair out trying to find the short.

I picked up a lead bending tool with one of my orders from Jameco. It was
only a couple of bucks, and sure saves the fingertips for more important
things - like toroid winding! ;-) It's made of red plastic, tapered,
and has lots of marking on both sides for lead lengths. It's made by
Production Devices, San Diego CA 92120

But read on for those of you who reflect the true ham spirit (i.e.,
cheapskates) ;-)

Any of you who have built S&S engineering kits (they are excellent, BTW),
might have read in the manual (you *do* read the manual, don't you?) that
an old toothbrush handle makes a good lead-forming tool. I have one that
has a hole in the handle that is two different diameters on each side.
One side is just right for straddling a 1/4 watt resistor across, and the
hole on the other side is perfect for diodes such as the 1N914, 1N4148,
etc. The radius of the handle produces a smooth bend in the leads that is
excatly right for the PCB hole layout.

So check your medicine cabinet for those old toothbrushes. They make good
lead-forming tools, as well as nice brushes for cleaning off the flux
once you've finished the kit. Right Chuck? :-) Happy bending and
brushing!

72,

Gary Surrency AB7MY
S&S TAC-1(40&80m) ARK30 38S OHR100 w/KC-2 HW-9 TS-570D
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

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Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 30 Mar 1998 00:41:06
From: "KA5T Larry Wise" <lewise@inetport.com>
To: "qrp" <qrp-1@Lehigh.EDU>
Subject: [7155] Re: SSB QRP - MFJ9420 CW adapter
Message-ID: <199803300142.TAA00728@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Well, on my TS450S the power setting for CW and FSK has no bearing on SSB power out.

The SSB power is controlled by the MIC knob and is really difficult to set such that that I am sure that I never exceed some given setting.... The CW/FSK setting is another control that sets the power key down only in those modes....

There is one control called PWR that seems to set an upper limit on all modes of power out, but it is not too smooth and is VERY touchy to adjust (as are all these little knobs) (read I have not learned how to use it correctly yet!! :-))

Because of this I never send in any contest entries on SSB claiming QRP.... CW is ok....The power 'creeps' up a little on CW, but I just set it for 4 watts and it's OK....

Tried some 40 SSB at about 5 watts with it last night in the WPX contest.... Like poking your finger in your eye... :-) Only got a W6, NP3U and KP3P although I could hear I, AH2, KH6, 4H9, FK8, VK4, JAVE6, 3D2, and some others..... Of course if I had all that aluminum in the air like Ron does....

When I transmit, the first pulse of audio goes up into the 10 to 50 range then settles down into the 5 watt range or wherever you have the MIC control set....

Of course a ground mounted Butternut and 5 watts is not the epitome for the WPX SSB test :-)
(Or any contest for that matter...) (But it worked for the Foxii...)

Had been working a little 20 SSB during the day with the MFJ9420...Did a little better than on 40....got XQ8, VE6, VE7, KP3, KH6, KL7, XE3/1, and several statesiders....but

some

of them had to work hard to dig me out....Fun....Made only 20 contacts on 20 and 3 on 40

This rig looks like it puts out about 7-10 watts on voice peaks...manual says 10-12 max...

It puts out 5 watts in the tune position.....Uses an MRF-477 as the PA...

Had ordered the CW adapter from MFJ for this rig on Wed this week, and it showed up at my

doorstep on Sat...Quick work by MFJ..... 39.95 postpaid....

Decided to install it last night after getting frustrated trying to work 40 SSB at

3 AM (don't ask...)

Of course nothing is ever easy, right?

This adapter (MFJ-415B for the MFJ9420 and 9440) is a daughter board that mounts on

three standoffs over the main board and connects to the main board via four pin and

two pin connectors. These connectors are pins in the main board that stick up high enough

to engage sockets on the daughter board. The two pin connector has ground and a point

in the VFO frequency controlling circuitry... The four pin connector has connections to PTT,

BAL MOD unbalance, some point in the receive audio string that is unused, and 10 volts

regulated. The BAL MOD unbalance circuit is on the main board and is used for the TUNE

function...

Instructions are quite clear, but there is some problem with installation. While the connector

pins are long enough to move around a little for any misalignment, the three screw holes

do not line up. Two were OK, but the third one missed by about 1/16 in. A little work with

the XACTO knife fixed that... There is really tight clearance when inserting the board, the

off/on switch shaft has to be depressed to it's full extent to allow installation...One of those

2 1/2 hand jobs at 3 AM...:-) After a couple of trys, and after straightening up the connector

pins I got it in and seated and screwed down..

The circuitry on the board consists of:

A power switch in the 10 volt reg line to power everything, Sticks through a hole

in the rear,

A stereo 3.5 mm phone jack (used as a key jack) aligned with a hole in the rear,
Two 2n3906 and a 2n3904 arranged as switches for the various functions,
A 2.8 khz piezo sounder used for sidetown, with a jumper to enable/disable,
An adjustable PTT line hold circuit to adjust T/R relay dropout time,
An adjustable VFO pad circuit to move the frequency down to 14.000 to 14.150 for CW.

This circuit is enabled by a reed relay which connects it to the VFO pin... The relay is

actuated when the CW switch is engaged, putting power on the board.

This circuit has a fixed and trimmer cap for the 20 m rig and a shielded coil for the 40 m rig.

A jumper selects which rig you are using. (No CW adapter is available for the 80 m rig

because of 'bandwidth considerations'.)

An adjustable CW offset circuit using an MV2104 tied into the VFO pin

When the CW switch is engaged the power is supplied to the board causing the frequency

to shift down to the low end of the band and the CW offset to be in effect. This allows

reception of CW signals, albeit with the wide filter, at whatever offset you set. (The rig comes with the front panel marked with both CW (14.000 - 14.150) and PHONE (14.150 - 14.350) ranges. The installation manual indicates that not all rigs may be marked this way.)

When the rig is keyed, the piezo sounder is turned on (if jumper enabled), the BAL MOD

is unbalanced, and the CW offset is disabled. When the key is let up, there is a delay

determined by the PTT delay circuit, then everything goes back to the receive state....

After installation is complete the setup entails the following steps:

Set the rig select jumper to 9420 or 9440.

Re-calibrate the VFO in phone mode to correct for any capacitance added to the circuit due

to the board installation.

Switch to CW on position

Calibrate VFO freq with dial for CW range

Set PTT hold time

Set CW offset

Enjoy...

I had one problem with this procedure. The trimmer cap wouldn't bring the freq down low enuf

to calibrate the dial correctly...missed by about 3 khz....The schemo calls for a

3-10 pf trimmer

with 39 pf in parallel... The board has a 33 pf installed....

Not a big deal, but I figure some component was not as intended... Want to set the dial

to be dead on at 14.060.... Need to add a few more pfs I guess.

Operation seemed ok except for two things:

The 2.8 khz sounder for the sidetown drives me bonkers....I like lowtones....

There is a big pop when the PTT line is let go.....don't know just what that is....

Like all the K1BQT rigs and derivatives, a relay is used for T/R switching...which I loathe....

Going to try and fix this some way.....

If anyone out there has converted a RadioKit or MFJ90xx or 94xx rig to eliminate the T/R

relay I would like to know the details....In the mean time I'm looking over the schematics of the

NORCAL, Wilderness, OHR, NN1G and other rigs for ideas.....(in the back issues of QRPp and

QRPQ and SPRAT of course...:-))

Other mods needed are a headphone jack, a RIT circuit, a CW filter and low tone sidetone...

Don't know if I'm up to tackling a crystal filter mod to provide both narrow and wide functions...

However there is lots of space on the daughter board for an audio filter for CW and a sidetone

oscillator... Maybe that's what that unused pin into the audio string was for anyway.....

There....More than you ever wanted to know about the MFJ9420 and it's CW adapter.....

What I really had in mind was to use it on QRP RTTY.....

Now to figure out those mods....

Larry KA5T

lewise@inetport.com

On Sun, 29 Mar 1998 11:05:30 -0800, Monte Stark wrote:

...

>

>I tried a little QRP SSB. Seems to work as well as 100w did the other

>day when I tried it. I set the rig to 5w on cw and then changed to SSB.

>Guess that makes me around 5w out!

>
>cul,
>--
>73, Ron, KU7Y
>

Date: Sun, 29 Mar 1998 18:00:32 -0800
From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: <ham@w3eax.umd.edu>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [7156] Re: Pblm with Sierra 15m module...
Message-ID: <01bd5b7f\$9f3b9be0\$9aa9d9cf@accurate-1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Your post is timely.

I have just finished helping a friend, AC6UV, test and align each of the available band modules for his Sierra. Low and behold we experienced the identical problem with his 15 meter module.

Perhaps we have an engineering or PC board layout problem?

FYI

Roger KD6CC

-----Original Message-----
From: Scott Rosenfeld [NF3I] <ham@w3eax.umd.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Sunday, March 29, 1998 2:28 PM
Subject: Pblm with Sierra 15m module...

>Am building. Have wound all toroids as required.
>
>Re-checked six times.
>
>RX is great (can be peaked nicely).
>
>Can't push power out on either of 2 Sierras (except when I DROP the drive
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>On a scope I do get 50 mV p-p of around 21 MHz.
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>Any ideas? I'm looking for yet another Sierra or a BUILT 15m module to
>compare this one with.
>
>Frustrating. Anyone come up with similar problems? Solutions?
>

Date: Sun, 29 Mar 1998 21:17:59 -0500
From: Rick McNelly <72507.235@compuserve.com>
To: leinwebe@mcmail.CIS.McMaster.CA, qrp-1@Lehigh.EDU
Subject: [7157] Re: Elmer101: parts ID
Message-ID: <199803292121_MC2-3854-8937@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Hi Glen,
please email me the parts ID list for the SW-40+, I ordered the 30M version,
but your list would be very helpful.

It would be great if you could post it on Mike KF4TRD's Elmer 101 webpage.

72/73's,

--Rick, KE4IZH

QRP-L # 493
72507.235@compuserve.com
Chesapeake, Va.
MP2.1K

Date: Sun, 29 Mar 1998 19:24:09 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: cstack@safelink.net
Cc: qrp-1@Lehigh.EDU
Subject: [7158] Re: QRPTTF, Border Ops
Message-ID: <199803300224.TAA20659@usr02.primenet.com>

Howdy Charlie (and Folks),

> I hope to operate in the QRPTTF Contest.

Great! It's guaranteed to be alot of fun, especially with the higher bands shaping up!

> [... SNIP ...] Is there a role for common sense here?

There's **always** a role for common sense, despite daily evidence to the contrary around the world. For example, my snowcamping/snowshoeing trip this weekend found me spending the night at 11,000 ft in the middle of a major snowstorm. :-)

(FYBO ain't the word for it, folks! ;-))

> How close is "close enough" to claim border operation.

On the actual border, or as close as practically possible for you to have a clean conscience. Do you have to have one leg on either side of the border, or can you setup at that nearby picnic table? Use common sense, use good judgement, and like everything else in life, let your conscience be your guide.

We're not going to come out and physically inspect your site for approval, any more than we're going stick an RF meter on your rig to verify you're really operating QRP.

We'll take your word for it, because there are still some tiny outposts of humanity where a person's word is considered good enough. NorCal (and QRPers in general) is one of 'em!

So relax, enjoy, radiate. Sure hope to swap some RF with ya on April 25th! Or any other day, for that matter. :-)

Cheers de AB7TT,

-Joe, vole@primenet.com, QRP TTF Contest Manager, Norcal,
AZ ScQRPions, and many other fine, furry groups.

"It's hard to be unhappy when you have warm feet."

- Dave Rose, Fellow Snow Camper

Date: Sun, 29 Mar 1998 22:23:05 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Cc: eax@w3eax.umd.edu, Laurel ARC <larc-l@webtrek.com>
Subject: [7159] Kit fun??? TWO 15m Sierra modules in a day!
Message-ID: <Pine.LNX.3.95.980329215754.806A-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Luckily, I happened to have TWO spare modules for 15m, unbuilt, before all of this started. I can't wait to try 10 and 12 meters.

THANKS TO ALL FOR THE ADVICE TO DATE.

Being obsessive about things, I spent THREE MORE HOURS in my 88-degree (yes, it was in the upper 80's here today in MD) shack.

Of course, being short one trim cap (it was quite obviously bad), I couldn't really do it completely...HOWEVER, what I DID do was put the bad cap into the xtal trimmer slot, where it wouldn't affect anything save for frequency - at least I could build and test the module.

So I did.

BOY, am I shvitzing up here!!! WOW, when did it become summer???

Result:

Followed IDENTICAL, careful, double- and triple-checking build procedure.

Freq. is virtually impossible to keep steady (expected, given bad cap).
RX alignment was really, really easy with the signal generator, although with the freq. all over the place, it was hard to "find" it given deaf RX.

Eventually I did and it came up beautifully.

TX was another issue altogether. WOW, was it ever touchy. Tweak C36
C33 C36 C33 C36 C33, readjust the drive level (max power occurs BELOW
max drive), then tweak some more, and CONSTANTLY fly right past the peak,

which is often achieved when one REMOVES the alignment tool from the cap.

Eventually, I did get about 1.70 watts (registered on RS digital wattmeter, echoed on the KC-2) and realized:

THESE MODULES ARE NOT INTERCHANGEABLE (inter-radio) WITHOUT RETUNING!

(at least, not above 14 MHz)

On Sierra #2, I was able to produce about a watt, which is not bad considering everything I'd seen.

I have pored over the first attempt at the 15m module, which is sitting forlornly in a plastic bag. It STILL won't give me more than about 0.20 watts output, although the RX works great.

So basically I proved to myself that I can, indeed, build a 15m Sierra module. Of course, only 1 out of 2 is working, which IMHO is a pretty poor batting average given the \$31 cost of these things and the hours of time invested.

I don't feel that I'm actually any closer to making the module work, although I'm certainly smarter and more confident now. Still, is it me? Am I THAT bad? Where do I go next? Change the caps? Rebuild the toroids in that section? After six-over checking, I'm sure they're right...

I guess I should add that, now having TWO Sierrae, I'm going to have to sell one. I decided to keep the service monitor, though...wish it had a spectrum analyzer, but boy is it nice to have a precision instrument. I can do S9 calibrations! :^)

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

On Sun, 29 Mar 1998, Roger A. McCarty wrote:

> Your post is timely.

>

> I have just finished helping a friend, AC6UV, test and align each of the
> available band modules for his Sierra. Low and behold we experienced the
> identical problem with his 15 meter module.

>

> Perhaps we have an engineering or PC board layout problem?

>

> FYI
>
> Roger KD6CC
>
> -----Original Message-----
> From: Scott Rosenfeld [NF3I] <ham@w3eax.umd.edu>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> Date: Sunday, March 29, 1998 2:28 PM
> Subject: Pblm with Sierra 15m module...
>
>
> >Am building. Have wound all toroids as required.
> >
> >Re-checked six times.
> >
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> >
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> >Any ideas? I'm looking for yet another Sierra or a BUILT 15m module to
> >compare this one with.
> >
> >Frustrating. Anyone come up with similar problems? Solutions?
> >
>
>

Date: Sun, 29 Mar 1998 18:26:03 -0800
From: Monte Stark <ku7y@dri.edu>
To: lewise@inetport.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7160] Re: SSB QRP - MFJ9420 CW adapter
Message-ID: <351F02BB.1F1BEE16@dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Larry and all,

I have had a couple of comments about the power control not controlling the power when on SSB.

So I just went in and played with my 1000MP. Whistling into the mic I set the gain control for full ALC. Then with the power control I could change the power from nothing (a few mW) to full power.

In reading the manual, (always nice to do after you get the rig all set up!), it says to set the mic gain to hit full ALC on voice peaks and then vary the power output from about 5w to 100w with the power control. And it also mentions using the lowest possible power output as a courtesy to other stations and etc.! Three cheers for Yaesu!

Looks like different rigs work in different ways!

Now to find that peak reading mod for the OHR watt meter that Larry East, W1HUE did awhile back in the Quarterly!

cul,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP ARCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Sun, 29 Mar 1998 21:30:41 -0500
From: Kevin Walker <KB9NUN@compuserve.com>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [7161] 38 Special "It Works!"
Message-ID: <199803292130_MC2-3853-9592@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Thanks to Bill-K9YEQ, Alan-W6RCL and Paul-NA5N my 38 special seems to be working. Got some good things to check, and I now seem to be "hearing" with the rig. Not sure exactly what I did though...did some trimming on the board looking for a short, checked the coils, and found that one of the

12mhz xtals may have had a cold solder joint. Powered it up and it worked=
!

Right now I have jumpered around R24 as this seems to be giving me more
audio. Now it's on the the TX portion, although I think all is well ther=
e.

Weather was so nice here in the Chicago area, I just couldn't get myself
into the shack in the basement this afternoon. Maybe later tonite though=
=2E

73,

Kevin-KB9NUN

=

=

Date: Sun, 29 Mar 1998 20:36:02 -0600
From: Mike - W0TMW <crucis@sky.net>
To: csnyder@nextdim.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7162] Re: [Fwd: Virus Alert]
Message-ID: <351F0512.326A0D77@sky.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bull! This is another hoax just like the umpteen other e-mail virus
hoaxes. This message came around our office a week or so ago. We all
had a good laugh. Variations on this has been around for about three
years now.

Mike = W0TMW

Chuck and Michele Snyder wrote:

>
> --
> Chuck Snyder (KD7BBF)
> <http://www.nextdim.com/users/csnyder/index.htm>
> QRP-L #1462
> Spokane, WA

```
>
>
-----
>
> Subject: Virus Alert
> Date: Sat, 28 Mar 1998 23:15:55 -0800 (PST)
> From: klam@mail.ewu.edu
> To: Ben Tiscareno <snow_rider@juno.com>, Khoi Nguyen <khoi@u.washington.edu>,
> Myla Honkanen <myla19@juno.com>, Tracy Kimmel <TK277168@wcupa.edu>,
> Sean McKinnie <sjmck@yahoo.com>, Nallely Galvan <chirris@juno.com>
> CC: Chuck Snyder <csnyder@nextdim.com>
>
> > > >>>>>><VIRUS WARNING>
> > > >
> > > >>>>>>If you receive an e-mail titled "WIN A HOLIDAY" DO NOT open it,
> > > >
> > > >>>>>>it will erase everything on your hard drive. Forward this letter
> > > >
> > > >>>>>>out to as many people as you can. This is a new, very malicious
> > > >
> > > >>virus
> > > >
> > > >>>>>>and not many people know about it. This information was
> announced
> > > >
> > > >>>>>>yesterday morning from Microsoft, please share it with everyone
> > > >>that
> > > >
> > > >>>>>>might access the Internet. Once again, pass this along to
> EVERYONE
> > > >
> > > >>in
> > > >
> > > >>>>>>your address book so that this may be stopped. Also, do not open
> or
> > > >
> > > >>>>>>even look at any mail that says "RETURNED OR UNABLE TO DELIVER"
> > > >>this
> > > >
> > > >>>>>>virus will attach itself to your computer components and render
> > > >>them
> > > >
> > > >>>>>>useless.
> > > >
> > > >>>>>>Immediately delete any mail items that say this. AOL
> > > >
> > > >>>>>>has said that this is a very dangerous virus and that there is
> NO
```

> > >> >
> > >> >>>>>remedy for it at this time. please practice cautionary measures
> and
> > >> >
> > >> >>>>>forward this to all your on-line friends.
> > >> >
> > >> >>>>> <Kimberly J. Griggs>
> > >> >
> > >> >>>>> Accounting Manager
> > >> >
> > >> >>>>> Gateway Systems Corporation
> > >> >
> > >> >>>>> 4660 S. Hagadorn, Suite 110
> > >> >
> > >> >>>>> East Lansing, MI 48823-5353
> > >> >
> > >> >>>>> (517) 337-8960
> > >> >
> > >> >>>>>
> >
> > Lien Le
> > Daniel Elementary
> > 11310 S.E. 248th
> > Kent, WA 98031
> > (206) 813-7615
> > (206) 813-7617 (fax)
> > lle@kent.wednet.edu
> >

--

```
=====
Mike Watson, W0TMW,          QCWA Mbr # 28651, Chap. 35
Raymore, MO USA             Grid: EM28st
http://www.sky.net/~crucis
E-mail: crucis@sky.net      ARS# 352, QRP-L# 1489
=====
```

Date: Sun, 29 Mar 1998 18:42:29 -0800
From: Monte Stark <ku7y@dri.edu>
To: nilsbull@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7163] Re: Solomon Islands na tok tok DX long contest . . .
Message-ID: <351F0695.30D5A495@dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi Nils,

Well, hurry if you want that H44 station co count for the Solomon IIs.

Starting with the first of April, that will be a new country, under the DXCC Year 2000 rules.

So, remember, H44RY and H44DX QSOs count for Solomon Islands credit.

H40AA QSOs will count for the new Temotu Islands DXCC entity, pending approval of the application.

This operation will be up and running as between now and the first to get all the bugs out of the set up. Starting with the first, the pile ups should be BIG.

This will be a country that everyone needs because it's never been on the air before!

Everyone is waiting for this to happen!

cul,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP ARCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Mon, 30 Mar 1998 03:14:54 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: dpayton@fwi.com
Cc: qrp-l@Lehigh.EDU
Subject: [7164] Re: More leadbending
Message-ID: <199803300314.DAA05145@chuck.dallas.sgi.com>

Denny,

Sharpest idea of the year. Thanks. Immediately obvious but rarely thought of.

dit dit

Chuck Adams K5FO Dallas, TX

CP-60

<http://reality.sgi.com/adams> adams@sgi.com

Date: Sun, 29 Mar 1998 22:02:46 -0800
From: Charles Kadesch <chas@digizen.net>
To: msebrakr@telepath.com
Cc: qrp-1@Lehigh.EDU
Subject: [7165] FORTH
Message-ID: <351F3586.3E9A@digizen.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Roger Braker wrote:

>
> What is the "Forth" programming language? Any web sites I can read about
> it? Thanks.

FORTH is kind of like QRP- you can do more with less. FORTH programs run almost as fast as assembly language. It has many unique and powerful features. It can be used for any application but is often used for real time control programs (appliance controllers, robotics, etc.) due to its high speed execution and its ability to interface with hardware on a bit level. I am using it to control an automatic antenna tuner using a 68HC11 microcontroller with on chip FORTH in ROM. You can find out more about FORTH at <http://www.forth.org/>

-72 de Chas W3KC-
chas@digizen.net

Date: Sun, 29 Mar 1998 19:26:50 -0800 (PST)
From: "John D. Spittle" <jds@vcn.bc.ca>
To: qrp-1@Lehigh.EDU
Subject: [7166] Epiphyte Confusion!
Message-ID: <Pine.GS0.3.95.980329192417.28380A-100000@opus.vcn.bc.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

KB9KOL's posting of 27 March 1998 has been forwarded to me for comment. Hopefully the following will clarify things:-

EP-1: The original Epiphyte 80M transceiver came out in 1994 and construction articles were published in both QRPP and SPRAT the same

year. The PCBs manufactured by Far Circuits, I believe, were identified as "KBE-3". The PCB has remained unchanged but most builders soon added an external 5W amplifier and external VFO.

EP-2: The EP-2 embodies both the above features on a PCB of the same size, but the RF bandpass filter is mounted separately. The first EP-2 article was published in the Winter 1995/6 issue of SPRAT with the board identified as "EP2.PCB OCT 95".

EP-2A: Before the article was reproduced in the March 1996 issue of QRPp some instability had been reported in the final amplifier. The output was then changed from a "T-match" to a "shunt fed broadband transformer". Although the original board could easily have been "modified", the PCB layout was revised slightly for the QRPp article. To avoid confusion the revised layout was identified as "EP-2A.PCB JAN 96".

EP-2(mod): Nevertheless, some instability still existed and eventually traced by Ed Burke, KI7KW and Dave Meacham, W6EMD to an inherent "ground loop" in the PCB layout. Ed's "quick fix" for this was published in subsequent issues of QRPp and SPRAT. Many "modified" EP-2s have been built worldwide and feedback on their performance has been complimentary.

EP-2B: Nevertheless, the thought of having to "modify" any PCB before construction is, if nothing else, aesthetically displeasing. A revised layout, identified as "EP-2B.PCB Jan 97", was drafted which eliminated the ground loop. But no article has been written describing it and I was not aware that any had been manufactured. For anyone who has acquired a board designated "EP-2B" it is not difficult to figure out. To avoid using a "jumper", the output transformer is "series" rather than "shunt" fed and the ground loop has been taken care of. The rest of the circuitry remains unchanged.

EP-3: I have since focused on figuring out a way to include the HF lowpass filter on the main board. Word is already out that prototypes are currently being thoroughly tested by KI7KW, W6EMD, G3MFJ and myself. (see NorCal's Website - photographs of W6EMD's EP-3 at the last lunch meeting). As soon as any bugs have been ironed out I anticipate that kits will be made available to NorCal and GQRP Club members.

To answer KB9KOL's remaining questions:-

Yes - it's possibly easier to find some of the parts to build an EP-1 + 5W amp + external VFO but most hams seem to prefer having everything on one board. The key components - SSB filter, most coils, toroids, RFCs, NE602s, IRF510 etc. - are used in all Epiphytes. The CA3020A driver replaces two VN10s, one inductor, the second relay in the amplifier and probably results in a net saving in cost.

Toko Coils are available from CIRKIT in the UK - as is the MuRata SSB filter.

All EP-2s were designed for 5W PEP but higher output has usually been reported.

Please send a copy of any further enquiries to me directly as I have temporarily suspended my subscription to QRP-L.

72/73 Derry VE7QK

Date: Sun, 29 Mar 1998 22:34:27 -0800
From: mike czuhajewski <wa8mcq@abs.net>
To: QRP forum <qrp-l@Lehigh.EDU>
Cc: Mike Czuhajewski <wa8mcq@abs.net>
Subject: [7167] MD hamfest, second report
Message-ID: <351F3CF3.C69@abs.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

As W6TOY reported already, we had a good QRP forum at the Timonium, MD hamfest on Saturday. We had 28 people in attendance, which I thought was quite good, since the weather was so nice outside. Immediately following the QRP forum was DXCC, and it had two--TWO!--people. Not really sure what that tells me, but maybe it's that the DXers are smart enough to be out hunting in the huge tailgating area instead of sitting inside :-)

NF3I and AA3MD are good motivational speakers for QRP. Scott is relatively new at QRP, and Craig has only been doing it for a couple of years, and they're the types of people we need speaking at these things--the guys who are still new at it, very active on the bands and enthused about selling QRP, and talking about all the joys of QRP and generally entertaining and pleasing the crowd. And then you have me, the Grizzled Vet and Certified Techno-Wienie, speaking about using your big rig to run QRP--ALC power controller voltages and polarities, setting internal pots on the underside of the rig to reduce the power at the lowest setting of the drive control, the horrible efficiency of the

big rigs at QRP levels, the effect on spectral purity from reducing the power and thus changing the impedance of the final amp and introducing mismatch at the input of the low pass filter, etc. You could HEAR the eyes glazing over! That's why I made sure I was the last speaker instead of the 3rd!

In all, the allotted one hour time slot was FAR too short, and we could have used two or three and covered dozens of topics--but the one hour limit was a blessing since it allowed us to get back to the tailgating quickly. The coffee was very QRO, by the way--one person told me he had to put 6 sugars and 6 cream packets into it to be semi-tolerable, and I ended up with--no exaggeration--a full dozen of each, although it was a BIG plastic cup. (Actually, I later added sugar #13 and #14!)

BTW, the effect of the mismatched final and filter input on spectral purity that people talk about every now and then? You'd have to prove to me that it's a problem. Several years ago when I was working part time at a local ham store I tested a Kenwood TS-440S on one of the \$10K+ communications service monitors and cranked the power down from 100 watts to 5 watts and less, and couldn't really see much of any degradation in the spurious outputs. Later, after I retired from USAF and started working at an engineering firm I took in my Kenwood TS-670 (a 4 band, all mode rig from the mid 80's, ten watts on 7, 21, 28 and 50 MHz) and put it on an HP spectrum analyzer. I checked the power at several steps from ten watts (full power) down to 5 milliwatts, and the only visible harmonic stayed right around 55 dB below the carrier at all times (within a couple dB).

--

73 and Queue Our Pea de WA8MCQ wa8mcq@abs.net

Date: Sun, 29 Mar 1998 23:13:18 -0500
From: "John J. McDonough" <jjmcd@mdn.net>
To: <kc5tja@topaz.axisinternet.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [7168] Re: WIN A HOLIDAY!
Message-ID: <199803300413.3157700@midland2.mdn.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

> From: KC5TJA <kc5tja@topaz.axisinternet.com>; owner-qrp-1@Lehigh.EDU
>
> Unfortunately, things like this are a total hoax. ASCII-formatted data,
> such as e-mail, cannot, nor will they ever, hold viruses[1].

WRONG, WRONG, WRONG, WRONG, WRONG!!!!!!

This note, like many recent notes of it's kind, is probably a hoax. HOWEVER, plain text email can, and does, carry viruses, worms and trojans. Please do not be lulled into believing that reading email is perfectly safe. The famous 'Internet Worm' of a few years back was carried on plain text email. Most of the early worms, trojans and viruii were carried on plain text email. For technical reasons, though, it's a lot more satisfying to attack unix systems this way than Windows. (This is not meant to imply that Windows is somehow more secure!) It is UNLIKELY that someone would attack Windows this way.

However, email, although transferred as plain text, can, and often does, contain active content. The newer mail readers, especially those from M\$ and Netscape, are very friendly and activate this content for you. This is a much more satisfying way of attacking Windows. (I'm picking on Windows because it represents over 80% of the systems out there.) If you're using Netscape 4 to read your mail this stuff can attack you as soon as you open your mail, so although it's not a 'plain-text' attack, it's just as good.

There is really only one practical way to be reasonably safe from viruses - back up. Backup frequently and backup completely. And keep several versions of complete backups. 3M publishes some rotation schemes in the little folder that comes in their tape. Many viruses activate themselves on a particular day, so you want to have multiple versions of backups on the shelf.

Sorry for the bandwidth. I've seen a dozen people claim plain text email can't hurt you - and there is plenty of history to the contrary. I sort of go postal when I hear this sort of myth enough times.

Obligatory QRP - I'm astonished about how well my 706 is doing turned down to 5 watts to a vertical. Isn't there something in the regs about 'minimum power necessary...'?

72/73 de WB8RCR

Date: Sun, 29 Mar 1998 22:47:57 -0700 (MST)
From: marion@montana.com
To: qrp-1@Lehigh.EDU
Subject: [7169] QRPTTF
Message-ID: <199803300547.WAA23348@paw.montana.com>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

To Joe Gervais and QRP-1:

I plan to be on the Montana Wyoming border at Yellowstone Park for QRPTTF.
Operation will be Sierra From solar charged batteries.
72, Roy, AB7CE

Date: Sun, 29 Mar 1998 21:22:58 -0800 (PST)
From: "S. Lee" <slee@u.washington.edu>
To: Chuck Adams <adams@chuck.dallas.sgi.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7170] Re: Battery chargers
Message-ID: <Pine.A41.3.95b.980329205135.100058C-100000@homer26.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Tower Hobbies sells a wall wart for charging 12 volt batteries.
It's stock number TOWP 1000. The label says the output is 12 VDC
at 600 mA. We've used one in our household for the past 6 years
to charge up 7 AH lead acid batteries. Works great and Tower Hobbies
is in the mail order business (for those of us not able to attend the
NorCal meeting). Tower Hobbies' website: <http://www.towerhobbies.com>
Enjoy! de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

PS No SGC-2020 check-in during Saturday's NW-QRP Club net.

Date: Sun, 29 Mar 1998 21:42:22 -0800
From: Vic Rosenthal <rakefet@rakefet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7171] 10-meter beam wanted
Message-ID: <351F30BE.2A7F234C@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This is really not QRP, but I would like to get a 3 or 4 element 10-meter beam if
anyone's got one they would like to sell or trade. 10 meters is starting to get
good, mostly due to the season, but

also due to the solar cycle finally getting moving. I suspect that this fall we should have some good openings to Europe from here on a regular basis.

In a way it is QRP, because the neat thing about 10 meters is what I call the 'focus': the band openings are shorter than on the lower bands, and move along with the sun. When the 'focus' is on you, your low power can produce a great signal -- and you're competing with a narrow band of other guys also in the focus, not all those TX KW's!

Another neat thing is that one wavelength above ground is only about 33 feet -- no need for an expensive tower.

Hmm, I better shut up or nobody will want to sell me a beam!

Vic K2VCO
Fresno CA

Date: Sun, 29 Mar 1998 21:50:47 -0800 (PST)
From: "S. Lee" <slee@u.washington.edu>
To: wb8ygg@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7172] Re: Portland Electronics Suppliers?
Message-ID: <Pine.A41.3.95b.980329213031.100058D-1000000@homer26.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Radar Electric, 704 SE Washington, (503) 232-3404. They might have some of those Fluke RF probes that were on sale at the Seattle store. Also look for Fluke equipment cases at 5.95 each. These will make dandy QRP rig cases. They're black injection molded plastic. The Seattle store also had ready made 723 voltage regulator circuit board assemblies at 4 for a dollar. Another item of interest were NOS high voltage probes (minus the precision HV resistor-dang!) for \$10.00. All of their Calterm brand meters and such are half price. I picked up a dandy 2x20 Optrex LCD display, NOS for \$3.95. (NOS=new old stock) Let us know what you find, OK!? de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

PS I don't work for Radar Electric...but I sure spend a lot of time and a little money there.

On Sat, 28 Mar 1998 wb8ygg@juno.com wrote:

> Any Electronics supply stores that are in Portland Oregon?
> WB8YGG

Date: Mon, 30 Mar 1998 00:01:27 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [7173] Gary Diana At Round Table Pizza Report
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Friday, right after school I stopped by the post office to mail a couple =
of packages, and then headed over the coast range of mountains to San =
Jose and the Beverly Heritage Hotel where I was to meet Gary Diana to =
pick him up to go to the QRP Pizza get together at the Round Table =
Pizza. Gary left his hotel and picked up his car at 3:30, then had to =
drive 40 miles to the Beverly Heritage. I left Dos Palos at the same =
time and had to drive 125 miles. Guess who got to the hotel first? You =
got it, I made it first. Gary came in about 10 minutes after I arrived, =
and we checked into the hotel and then headed for the party at the pizza =
place.

When we arrived we found that most of the crew was there, Ori =
Mizrahi-Shalom, Vern Wright, Vic Black, Andreas, Paul Maciel, Dave =
Fifield, and Mike Gipe. Gary and I made the group total nine, and we =
devoured four extra large pizzas. Doug Hauff showed up a half an hour =
late, but we were all happy to see him. He brought along a Rainbow =
Tuner enclosure that is bomb proof. I just have to have one. Mike =
brought along several of his home brew projects and Gary showed all of =
us the Tixie boards and the new EMB keyer board with battery backup. =
The EMB was built into a Celestial Seasonings tin, which is slightly =
smaller than an Altoids, and even had room to put the 9 volt battery in =
there. We had a great time discussing the state of QRP and all of us =
talked about the latest on QRP-L. One topic was the failure of SGC to =
deliver their rig, another was the anticipation to see the K2 at the =
next meeting. We also talked about the various methods used to bend =
leads. The get together broke up about 10 PM.

Afterwards, Mike, Dave, Doug, Gary and I returned to our hotel where we =
discussed the next NorCal project which will be announced at Dayton. =
Paul Harden was supposed to attend but was unable due to the fact he was =
called in to work this weekend. The project is right on schedule, and =
everything is a go so far.

Saturday, Gary and I went to several of my "parts haunts" and I was able =
to show him the selection of surplus that is available on the west =

coast. I left Gary at the hotel and returned to Dos Palos, arriving =
about 6:30. It was a very enjoyable and fruitful 24 hours. Thanks to =
all of the QRPers who attended and hope to see you again at the next =
pizza get together. Have a good week. 72, Doug, KI6DS

Date: Mon, 30 Mar 1998 00:07:59 -0800 (PST)
From: talljazz@teleport.com (Dan Presley)
To: ham@w3eax.umd.edu
Cc: qrp-1@Lehigh.EDU
Subject: [7174] Re: Pblm with Sierra 15m module...
Message-ID: <v0153050fb1448d46578f@[204.202.160.112]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Scott-have you modified your Sierras as sugessted by Wilderness for band
modules above 20M? Depending on the vintage, you may need to change Q5 from
a J309 to a 310, and remove D11 & 12, and replace with a 220 ohm resistor
and a .01 cap.These come off of L11 at the same point and connect to
ground-you can use the old holes from D11 & 12.After doing this, band
modules for 17, 15 & 12 M worked very smoothly, and tuned up no problem.
Dan N7CQR

Date: Mon, 30 Mar 1998 05:53:57 EST
From: aa5yx@juno.com (John F. Harper)
To: qrp-1@Lehigh.EDU
Subject: [7175] Argonauts explained?
Message-ID: <19980330.055300.4551.0.AA5YX@juno.com>

I've searched the web high and low for a web site that explains the
differences between the various models of Argonauts, but alas, nothing to
be found. If anyone know of such a site could you please pass it along?
I'm thinking of buying one someday and would like to know which is which
when I see them listed for sale.

Thanks,
John Harper AA5YX/2
<http://home.att.net/~j..harper>

You don't need to buy Internet access to use free Internet e-mail.

Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 30 Mar 1998 05:02:00 -0700 (MST)
From: marion@montana.com
To: qrp-1@Lehigh.EDU
Subject: [7176] Re: Pblm with Sierra 15m module...
Message-ID: <199803301202.FAA18034@paw.montana.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 12:07 AM 3/30/98 -0800, you wrote:

>Scott-have you modified your Sierras as sugessted by Wilderness for band
>modules above 20M? Depending on the vintage, you may need to change Q5 from
>a J309 to a 310, and remove D11 & 12, and replace with a 220 ohm resistor
>and a .01 cap.These come off of L11 at the same point and connect to
>ground-you can use the old holes from D11 & 12.After doing this, band
>modules for 17, 15 & 12 M worked very smoothly, and tuned up no problem.
>Dan N7CQR

>
>
>

>My Wilderness Sierra is revision D, with all these mods standard issue.
Still had great difficulties with 15,12 and 10mtr module tuning until I
modified them. Roy AB7CE

>

Date: Mon, 30 Mar 1998 08:12:15 -0500
From: Stephen Trier <sct@po.cwru.edu>
To: qrp-1@Lehigh.EDU
Subject: [7177] 2N2222: Final amp efficiency?
Message-ID: <3.0.1.32.19980330081215.00922d80@pop.cwru.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi, gang.

Along the lines of "more with less", what kind of efficiency are your
2N2222 rigs seeing in the final amplifiers? Jim, if your rig is putting
out 2W with no heat sinks, it must be pretty efficient.

I've been playing with 10 MHz class D amplifiers for my thesis work. In the spirit of the NorCal contest, I built one with 2N2222's, but had disappointing results. I saw only 44% efficiency (DC in versus RF out), and I think that even if I improve the design, I'm not likely to see much more than 50%. I assume this is a lot worse than what you folks are getting with your class C amplifiers. (Jim, I'd guess your triple-2N2222 final is at least 67% efficient?)

I'm not going to be able to enter the 2N2222 contest because of the time this grad-student thing is taking, but I've enjoyed reading along as you folks have worked on your rigs. Thanks for sharing your news with the list!

Stephen

--

Stephen Trier KG8IH
sct@po.cwru.edu

Date: Mon, 30 Mar 1998 06:18:06 -0600
From: "Dick Schneider" <rschneid@ix.netcom.com>
To: qrp-l@Lehigh.EDU
Subject: [7178] FOR SALE: Ten Tec Argonaut 505 QRP CW/SSB Transceiver & Pwr Sup
Message-ID: <199803301324.HAA24392@dfw-ix14.ix.netcom.com>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

FOR SALE: Ten Tec Argonaut 505 QRP CW/SSB Transceiver & Pwr Sup

TenTec Argonaut 505 CW/SSB Transceiver & 251 Pwr Sup \$350 OBAO
-3-5 Watts output. 80-10 Meters. No WARC.
-Realigned and refurbished recently by Ten Tec
-Excellent condition. No modifications.

TenTec 251 power supply
-w/TenTec 207 ammeter

Prices include shipping to CONUS

Email replies to rschneid@ix.netcom.com
72/73 Dick AB0CD..

Date: Mon, 30 Mar 1998 06:18:06 -0600
From: "Dick Schneider" <rschneid@ix.netcom.com>
To: qrp-1@Lehigh.EDU
Subject: [7179] FOR SALE: HW9 CW QRP Transceiver w/ps
Message-ID: <199803301324.HAA24385@dfw-ix14.ix.netcom.com>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

FOR SALE: HW9 CW QRP Transceiver w/ps

HW9 CW Transceiver w/PSA9 matching power supply \$375 OBAO
-3-5 Watts output
-80-10 Meters, including all WARC bands
-Excellent condition. No modifications.

Prices include shipping to CONUS

Email replies to rschneid@ix.netcom.com
72/73 Dick AB0CD..

Date: Mon, 30 Mar 1998 08:42:03 -0800
From: LYN <designserv@ipass.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7180] Re: Battery chargers for GEL batteries
Message-ID: <351FCB5B.BE193FF6@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Re: Gel battery charging.

"A car battery charger will ruin them"

This is quite likely true, but not absolutely certainly true,
since some "car battery chargers" may be well designed
and have selectable settings for this type of battery.

"I just use a 317 regulator set to 2.4 V to 2.5 V per cell - 14.4 V to
2.25 V to 2.3 V per cell."

Sounds like a good way to kill a gel cell.

Can't say for certain,because maybe you have
invented a new kind.

> I should really be limiting the current to the
> correct value, but I can't be bothered to add the additional circuitry.
>

Kinda reminds me of what my dentist said -- you don't need
to floss ALL your teeth; just the ones you want to keep.

Really, guys. Batteries come from different manufacturers,
most (but not all) of whom understand batteries and want
their customers to have good experiences with their batteries.
They are generally willing to send you a FREE bulletin
describing how to get best performance and life out
of their batteries. Just be sure to ask for the bulletin
for the specific model of battery, because the same
manufacturere makes other bulletins which apply
to other batteries and DO NOT apply to some
types of batteries.

Charging a battery correctly for maximum storage and
maximum life is NOT a simple one-step process.

Certainly, you can do it like you always did and it
always worked before, but if you were not actually
quantifying the performance you got before with
respect to ampere hours stored and recovered
and how many charge/discharge cycles the battery
lasted before you killed it, then PLEASE don't tell
someone else else that the right way is ---(some simple
procedure involving setting one knob and turning the
switch ON).

I apologize to those who are tired of hearing me
ramble on about batteries.

Lyn

Date: Mon, 30 Mar 1998 09:16:53 -0500
From: John Mckee <JMckee@RFMD.com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [7181] Walking Stick Antennas

Message-ID:

<c=US%a=_%p=RF_Micro_Devices%l=PACHACUTEC-980330141653Z-34433@proxy1.rfmd.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Content-Transfer-Encoding: 7bit

Hi Gang,

I remember reading an article in QST describing the walking stick antenna. It was designed by Rob Capon (W3DX). The Knightlites used several 40 meter versions for phased arrays. I've also seen a 20 meter version made from aluminum tent poles with a bungee cord inside. I'll look through my QSTs (got every issue back to 7/76) and find out which issues the articles are in.

73's

John WB4OFT

Date: Mon, 30 Mar 1998 08:26:16 -0600

From: "Jeff M. Gold" <JGold@tntech.edu>

To: QRP-L <qrp-l@Lehigh.EDU>

Subject: [7182] Ten Tec Meter Kit

Message-ID: <008a01bd5be7\$cc7da040\$4d0b9595@mm-man.cc.tntech.edu>

MIME-version: 1.0

Content-type: text/plain; charset="iso-8859-1"

Content-transfer-encoding: 7bit

Howdi and happy monday!

Well had some more time to play with the meter kit. I was disappointed about a few things about the kit. This is by no means a put down, or a voice of regret. I really was peaved that that Ten Tec only included one color hook up wire. They didn't include enough with my kit to wire everything (and I used their exact wire lenghts). What really peaved me was the wire ends broke off very easily. I followed their instructions and wired the boards then started putting the boards in the case. If you wiggle or the wires get inadvertantly wiggled while wiring other parts of the board, the ends break off. If you have installed the boards this is a real pain in the ... to take it apart remove the solder and put the wires back.

Was also surprised they didn't include a power plug to match the jack. I believe most of the complete kits by smaller manufacturers do.. no biggy.. just a comment.

I was also surprised at the alignment. As I remember on my OHR QRP wattmeter the alignment was done with voltage measurements. You basically need a professional grade wattmeter that either does both HF and VHF, or two separate meters to accurately calibrate the kit. The instructions say you can use a known output from your Hf rig and VHF rig.. but then you are using those inaccurate meters to calibrate what you want to use to check on the rigs in the first place. I will try to get a meter loaned to me. On the other side of the coin, the alignment is real quick and easy.

My meter seemed to come up right away using a 9 volt battery and using my old Kenwood 930 to check it out in the ballpark.

Just my PERSONAL comments.. no harm intended.

72

Jeff, AC4HF

=====

Jeff M. Gold

Manager, Academic Computing Support

Tennessee Technological University

Date: Mon, 30 Mar 1998 09:02:48 -0500

From: "Buck, Preston D" <BuckPD@corning.com>

To: "'mikemo@ibm.net'" <mikemo@ibm.net>

Cc: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>

Subject: [7183] RE: Another N/T+ fox makes Advanced

Message-ID: <6B137F61081DD0118DF600805FEAC5C5FF2033@SILVER.CORNING.COM>

Content-Return: allowed

Mime-Version: 1.0

Content-Type: text/plain

Congratulations Mike and Well Done!!!

Feels good doesn't it, and check out 30 meters.

73

Preston, n0glm/aa, Southern NY State

My words, not my employer's

Date: Mon, 30 Mar 1998 10:00:27 -0800
From: LYN <designserv@ipass.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7185] Knightlights trip to CORE BANKS
Message-ID: <351FDDBB.B6CC1499@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,

I've just got to tell you that the QRP expedition to Core Banks was almost unbelievable! It was a GREAT trip! We put up more antennas, flew more kites with beacons, worked more stations all over the world, and walked more miles through the sand than I ever thought would happen! The weather was absolutely ideal.

The pictures are being processed and will be made available asap.

Seriously, anyone who doesn't get in on this kind of fun just doesn't like fun! We're already beginning to talk about our next trip. Now's the time if you want to get in on it. Now, if we can just figure out how to rotate a rhombic ...

73,
Lyn, W4WDN

Date: Mon, 30 Mar 1998 11:08:00 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-1 <qrp-1@Lehigh.EDU>
Cc: Laurel ARC <larc-1@webtrek.com>
Subject: [7186] QRP Dayton events make Amateur Radio Newsline!!!
Message-ID: <Pine.LNX.3.95.980330110542.4672G-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I guess Cam, KT3A, and I pestered Bill Pasternak enough!

Bill told me that an announcement of the QRP events would be contingent on an open slot in the programming. WE GOT IT THIS WEEK!

(2 weeks ago it was the WSWSS events that got the airtime, I think)

Good going, Cam or whomever!

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

Date: Mon, 30 Mar 1998 09:21:04 -0600
From: "ukii" <ukii@megsinet.net>
To: "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [7187] Tower Help please.
Message-ID: <008b01bd5bef\$78107de0\$714e85d0@ns1.megsinet.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Gang...

Well,back to the well for some more NAH-LEDGE....

Please,I never had a tower but recently bought a used
Tri-Ex W51 tower. Its a 51foot crankup deal.

It did not come with the base (cage) that gets burried
in the cement.

What I would like to know from you is if I MUST get the base from
the factory or if I can somehow make a base for it?

I want to be sure the tower wont fall over but at 235 bucks for
some rebar,well,,,

So,please,is there a way to get around buying the base from Triex
or should I ?

Thanks VERY MUCH. This tower deal was kind of forced on me by
a fellow ham who is convinced I need an antenna more than 10 feet
off the ground.

Any help is greatly appreciated.

73 de john

n9ukx

Date: Mon, 30 Mar 1998 07:23:34 -0800
From: Monte Stark <ku7y@dri.edu>
To: designserv@ipass.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7188] Re: Battery chargers for GEL batteries
Message-ID: <351FB8F6.AF20E2BD@dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Lyn and all,

Nothing technical from me but do want to share my observations which tend to back up what Lyn said.

When I came on board here at DRI, the cloud seeding program used home made voltage regulators in our field equipment. This was to control the charge from a solar panel to 2 auto batteries. The batteries are isolated using diodes.

At this time we had 12 batteries in service in 6 different units.

Each season there were ALWAYS dead batteries.

One of the first changes I made was to stop using those regulators and in their place I use units that I buy from the same place I buy the batteries and solar panels.

Now we have 46 batteries in service in 23 different units.

The only time we ever have trouble now is if a storm breaks a solar panel or rips a loose wire off. We have not had a dead battery since using these regulators.

The regulators cost about \$50 each. A helicopter cost about \$550/hr to get us on site to replace a dead battery. Another lesson in spending money to save money!

(These units are subject to 3 to 5 feet of rime ice build up and to winds in excess of 180 mph. This winter we had one 2" square tubing solar panel mast break off!)

Moral of this story is that charging correctly does make a big difference!

cul,

Ron, KU7Y

Date: Mon, 30 Mar 98 7:30:01 PST
From: Paul Erickson <paul1@wizard.ucs.sfu.ca>
To: qrp-l@Lehigh.EDU (qrp)
Cc: cw@qth.net (CW - Reflector)
Subject: [7189] Kent paddle tuneup?
Message-ID: <9803301530.AA26335@wizard.ucs.sfu.ca>

I am currently using WBL, Kent, G4ZPY, and Norcal paddles. In using the Norcal's with their magnetic return mechanism, I am finding the Kent's a bit sluggish in comparison. I adjust them by backing off the springs and then holding them vertically and tighten up the springs just enough to hold the proper gap. In looking at the design, I think the culprit is either the springs, or the mass of the arms. I wonder if anyone has found any lighter springs that will work, and am thinking about VERY carefully drilling out the arms to reduce their mass/moment of inertia?

Any thoughts?

cheers, Paul VE7CQK/email: paul1@wizard.ucs.sfu.ca

Date: Mon, 30 Mar 1998 11:05:40 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [7190] Anyone know when/if there's a Dayton QRP forum?
Message-ID: <Pine.LNX.3.95.980330110404.4672F-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I just checked the Hamvention web site.

And I quoth "Never more." Oh, wait, that's the raven who does that...

THE FOLLOWING HAVE NO INFORMATION
QRP
SAREX
SCANNER
AMSAT
MIDCARS
LEGAL ISSUES FOR AMATEUR RADIO

Who's on the hook for this? Anyone?

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

Date: Mon, 30 Mar 1998 10:58:12 -0500
From: Fred Lesnick <flesnick@Quetico.tbaytel.net>
To: njqrp@njqrp.org, qrp-l@Lehigh.EDU
Subject: [7191] QRP A>T>U and SWR Bridges
Message-ID: <351FC114.2F8@tbaytel.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Would like to know what is being used out there by other QRPers in the way of ATU's and SWR bridged. Currntly I am using my QRO stuff but it is too bulky for when out backpacking or camping. Would like to get something I can put together and build, be it kit form or from schematics from scratch. Please reply directly to me as to save bandwidth.
Thanks FRED VE3FAL

Date: Mon, 30 Mar 1998 10:35:23 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: "Jeff M. Gold" <JGold@tntech.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7192] Crummy hook-up wire
Message-ID: <Pine.LNX.3.95.980330103118.4672D-1000000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I will echo these comments; I built one about a year ago, and had to break it down for whatever reason I found at the time...that white-insulated wire broke on me in three separate places on the boards.

This was particularly inconvenient because of the way the guts/connectors/etc. of the meter is mounted - bolted to the back wall of the unit.

This is great for physical integrity, but if you ever have to replace anything on the board, watch out.

Of course, once a wire breaks, you either stick a REALLY small iron in the 1/4" space behind the board to try to get it tacked back in place, or you dismantle the thing.

And that wire makes this almost a necessity (a friend built one and I volunteered to troubleshoot it, and did the same thing to his).

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

On Mon, 30 Mar 1998, Jeff M. Gold wrote:

> Howdi and happy monday!

>

> Well had some more time to play with the meter kit. I was disappointed about
> a few things about the kit. This is by no means a put down, or a voice of
> regret. I really was peaved that that Ten Tec only included one color hook
> up wire. They didn't include enough with my kit to wire everything (and I
> used their exact wire lenghts). What really peaved me was the wire ends
> broke off very easily. I followed their instructions and wired the boards
> then started putting the boards in the case. If you wiggle or the wires get
> inadvertantly wiggled while wiring other parts of the board, the ends break
> off. If you have installed the boards this is a real pain in the ... to take
> it apart remove the solder and put the wires back.

>

> Was also surprised they didn't include a power plug to match the jack. I
> believe most of the complete kits by smaller manufacturers do.. no biggy..
> just a comment.

>

> I was also surprised at the alignement. As I remember on my OHR QRP
> wattmeter the alignment was done with voltage measurements. You basically
> need a professional grade wattmeter that either does both HF and VHF, or two
> seperate meters to accurately calibrate the kit. The instructions say you
> can use a known output from your Hf rig and VHF rig.. but then you are using
> those inacurrate meters to calibrate what you want to use to check on the
> rigs in the first place. I will try to get a meter loaned to me. On the
> other side of the coin, the alignement is real quick and easy.

>

> My meter seemed to come up right away using a 9 volt battery and using my
> old Kenwood 930 to check it out in the ballpark.

>

> Just my PERSONAL comments.. no harm intended.

>

> 72
> Jeff, AC4HF
> =====
> Jeff M. Gold
> Manager, Academic Computing Support
> Tennessee Technological University
>
>

Date: Sun, 29 Mar 1998 22:04:17 -0600
From: "Bruce Barley" <lbbbarley@feist.com>
To: <ukii@megsinet.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [7193] Re: Tower Help please.
Message-ID: <199803301604.KAA21091@wichita.fn.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hello, John -

Remember the quote from Shakespear : "First we kill all the lawyers..."

What your \$235 is paying for is a:) Manufacturor's Liabililty Insurance - you buy the base once, but they are liable forever; and b:) their engineering knowlege of stress and loads - the manufacturor knows from extensive testing exactly what is required to safely hold up the rest of his tower, and they provide exactly that (plus a substancial safety margin) to the purchaser. In addition, you should be also provided with detailed installation instructions.

No - Of course you don't absolutely "have to" have their exact base for the tower. But from your OWN personal liability standpoint, if you put the tower up using anything else, the onus is on you (and your insurance company) if the tower collapses, falls down, etc with any resulting deaths / injuries or damage.

Your milage may vary. 72's & 73's

Bruce KB0PZD qrp-l # 69
lbbbarley@feist.com

> From: ukii <ukii@megsinet.net>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Subject: Tower Help please.

> Date: Monday, March 30, 1998 9:21 AM
>
> Hello Gang...
> Well,back to the well for some more NAH-LEDGE....
> Please,I never had a tower but recently bought a used
> Tri-Ex W51 tower. Its a 51foot crankup deal.
> It did not come with the base (cage) that gets burried
> in the cement.
> What I would like to know from you is if I MUST get the base from
> the factory or if I can somehow make a base for it?
> I want to be sure the tower wont fall over but at 235 bucks for
> some rebar,well,,,
> So,please,is there a way to get around buying the base from Triex
> or should I ?
> Thanks VERY MUCH. This tower deal was kind of forced on me by
> a fellow ham who is convinced I need an antenna more than 10 feet
> off the ground.
> Any help is greatly appreciated.
> 73 de john
> n9ukx
>
>
>

Date: Mon, 30 Mar 1998 11:13:35
From: Roger Braker <msebrakr@telepath.com>
To: qrp-l@Lehigh.EDU
Subject: [7194] shipping method?
Message-ID: <3.0.1.16.19980330111335.36f7a12e@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Guys,
Does anyone know what shipping method Dave Benson uses? Ok, so I'm just I
little impatient:-)

73,
Arnold kd5ckh

Date: Mon, 30 Mar 1998 11:25:59 -0500
From: Zack Lau <zlau@arrl.org>
To: qrp-1@Lehigh.EDU
Subject: [7195] Re: QRPTTF
Message-ID: <351FC797.218F@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I thought about operating from the CT/NY/MA corner, but the hike is much longer during the Winter/Spring when the roads are closed.--Zack W1VT

http://www.cris.com/~Mfedor/cthp/ct_photos_tristate.shtml

Date: Mon, 30 Mar 1998 10:46 -0700 (PDT)
From: eakwik@mail.hac.com
To: qrp-1@Lehigh.EDU
Subject: [7196] Re[2]: Mobile Interference
Message-ID: <0EQN0060V3XESZ@mail.hac.com>
MIME-version: 1.0
Content-type: MULTIPART/MIXED; BOUNDARY="Boundary_(ID_6sN+NCwkw10FXWAN0fo5BQ)"

--Boundary_(ID_6sN+NCwkw10FXWAN0fo5BQ)
Content-type: TEXT/PLAIN; CHARSET=ISO-8859-1

I work in the auto industry and specialize in vehicle requirements. There are some standards established for electromagnetic field emissions at 10 meters(SAEJ551/2, EEC 72/245), radiated emissions at the on vehicle antenna voltage limits(CISPR 22, FCC-15B, VCCI3), and conducted emissions. But it is my experience is that they are being used only as design guides. I have not seen an engineering approach the tries to manage the EMI/RFI all of the vehicle components and subsystems.

Ed Kwik KC8JIE Waterford, MI qrp-1# 1444

----- Reply Separator -----
Subject: RE: Mobile Interference
Author: Tracy@bytemark.com at mime
Date: 3/29/98 7:38 AM

Good question regarding FCC and vehicles. I doubt that whomever designed these

boards even considered that ...

-----Original Message-----

From: Michael Neverdosky [SMTP:MichaelN@cycat.com]
Sent: Sunday, March 29, 1998 7:08 AM
To: Low Power Amateur Radio Discussion
Subject: Re: Mobile Interference

Computers in businesses and homes have to meet standards for radiation, what about computers in vehicles? Anybody know the FCC rules section that would cover this?

Far and away the best place to suppress noise is on the board. By proper layout and bypassing, with on-board filtering, radiation can be greatly reduced. The problem is that this must be done during design of each board.

michael N6CHV

Tracy@bytemark.com wrote:

>
> I've been reading the various posts regarding the reduction of interference
> generated by the automobile systems. Hang it up.
>
> The problem, on most new vehicles, is the various computers in and about the
> vehicles systems. Anti-lock breaks, fuel injectors and timing. More and more
> these circuits are controlled by computerized circuitry. Some of today's
> vehicles have entirely microprocessor controlled electrical and gauging
> systems.

--Boundary_(ID_6sN+NCwkw10FXWAN0fo5BQ)
Content-type: TEXT/PLAIN; CHARSET=ISO-8859-1

RFC-822-headers:

Received: from CONVERSION-DAEMON by mail.hac.com (PMDF V5.1-10 #26245)
id <0EQL007017U2AT@mail.hac.com> for "edward a jr kwik"@mime.mail.hac.com;
Sun, 29 Mar 1998 07:46:51 -0800 (PST)
Received: from PROCESS-DAEMON by mail.hac.com (PMDF V5.1-10 #26245)
id <0EQL007017U2AS@mail.hac.com> for "edward a jr kwik"@mime.mail.hac.com;
Sun, 29 Mar 1998 07:46:50 -0800 (PST)
Received: from fw-es05.hac.com by mail.hac.com (PMDF V5.1-10 #26245)
with ESMTP id <0EQL0044E7U145@mail.hac.com> for
"edward a jr kwik"@mime.mail.hac.com; Sun, 29 Mar 1998 07:46:50 -0800 (PST)
Received: from fidoii.CC.lehigh.EDU ([128.180.1.4])
by fw-es05.hac.com (8.8.4/8.8.4) with ESMTP id HAA23756 for
<eakwik@mail.hac.com>; Sun, 29 Mar 1998 07:48:56 -0800 (PST)

Received: from Lehigh.EDU ([127.0.0.1]) by fidoii.cc.Lehigh.EDU with SMTP id <13023-32044>; Sun, 29 Mar 1998 10:51:22 -0500
Received: from nss4.cc.Lehigh.EDU ([128.180.1.13]) by fidoii.cc.Lehigh.EDU with ESMTP id <13023-32044>; Sun, 29 Mar 1998 10:50:51 -0500
Received: from global.orlando.com (orlando.com [209.26.2.40]) by nss4.cc.Lehigh.EDU (8.8.8/8.8.5) with ESMTP id KAA85534 for <qrp-l@lehigh.EDU>; Sun, 29 Mar 1998 10:50:42 -0500
Received: from titan (usr7-118.gdi.net [209.26.117.246]) by global.orlando.com (Post.Office MTA v3.1 release P0205e ID# 0-34438U100L2S100) with SMTP id AAA173; Sun, 29 Mar 1998 10:44:51 -0500
Received: by localhost with Microsoft MAPI; Sun, 29 Mar 1998 11:03:05 -0500
Date: Sun, 29 Mar 1998 09:38:57 -0500
From: Tracy@bytemark.com (Tracy)
Subject: RE: Mobile Interference
Sender: owner-qrp-l@Lehigh.EDU
X-To: "'MichaelN@cycat.com'" <MichaelN@cycat.com>, "QRP-L (E-mail)" <qrp-l@Lehigh.EDU>
Reply-to: Tracy@bytemark.com
Message-id: <01BD5B02.3FAFF400.tracy@bytemark.com>
MIME-version: 1.0
X-Mailer: Microsoft Internet E-mail/MAPI - 8.0.0.4211
Precedence: bulk
X-Listprocessor-version: 8.1 beta -- ListProcessor(tm) by CREN

--Boundary_(ID_6sN+NCwkw10FXWAN0fo5BQ)--

Date: Mon, 30 Mar 1998 10:26:39 -0600
From: "George T. Baker" <w5yr@swbell.net>
To: ukii@megsinet.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7197] Re: Tower Help please.
Message-ID: <351FC7BF.AA6B95AF@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Just one thought: if you must obtain a permit before erecting the tower, many municipalities require an engineering analysis of the tower before granting a permit. Most of these are willing to accept the manufacturer's specifications for this.

If you use an odd-ball base, you might get turned down. And I suspect that you will find that there is quite a bit more to the base than a lot of rebar.

You may be putting this up "way out in the country" as we say in Texas, so no permit is required. But, personally I would feel very uncomfortable trying to second guess the factory unless I was professionally qualified to design an adequate base. A tower crashing to the ground is not a pretty sight/sound!

As with all crankup towers, you might want to look into using heavy wooden or metal bars thrust into the sections at the right places to prevent the tower from collapsing if anything goes wrong with the winch or cable. ALWAYS use something like that if you should ever climb the tower (they do get stuck at times) since a collapsing tower will take you toes/feet right off.

With that cheery thought, good luck, and I sure envy you that height for your antennas!

--

72/73, George
Amateur Radio W5YR (since 1946)
QRP-L #1373 QRP ARCI #9583
AutoPOWER Systems
Fairview, TX (30 Mi. N. of Dallas)

ukii wrote:

>
> Hello Gang...
> Well,back to the well for some more NAH-LEDGE....
> Please,I never had a tower but recently bought a used
> Tri-Ex W51 tower. Its a 51foot crankup deal.
> It did not come with the base (cage) that gets burried
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> or should I ?
> Thanks VERY MUCH. This tower deal was kind of forced on me by
> a fellow ham who is convinced I need an antenna more than 10 feet
> off the ground.
> Any help is greatly appreciated.
> 73 de john
> n9ukx

Date: Mon, 30 Mar 1998 10:31:15 -0600

From: "Adam B. Kanis" <adam-kanis@uiowa.edu>
To: "James R. Duffey" <ji3m@maxwell.com>
Cc: qrp-1@Lehigh.EDU
Subject: [7198] Re: R-2 Front End Comments and Suggestions
Message-ID: <3.0.32.19980330103110.007d98a0@molsun.ophth.uiowa.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

jim,

wow, nice note. lots to chew on.

pulled down my copy of Solid State Design (the first release), and found the filter design section in one of the appendices. never saw it before! also checked out some of the front-ends you're talking about, pretty good, though most of them are using 40673 dual-gate devices as mixers. If i'm not interested in mixing, could a single gate FET be used with those same circuits?

>"Solid State Design" by DeMaw and Hayward has an appendix with bandpass
>filter designs for the Ham Bands (sans WARC unfortunately) and other useful
>frequencies as well. It also includes examples of matching into and out of
>the filters and how to align the filters. I think it is one of the best
>sources of information for front end filters.

>The R-2 has good strong signal handling capability and you don't want to
>degrade it by a poor front end. The R-2 should have more than adequate
>sensitivity and noise figure at 10 MHz and below, and maybe 14 MHz, and
>thus not need a preamp. On higher frequencies you probably shouldn't use
>any more gain than necessary to get you below the external noise.

yes, i saw that in one of KK7B's articles as well. for 30m and below, i'll just use filters, above that filters and some pre-amplification.

>I do not know much about the strong signal handling capability of the
>MMICs, but I suspect that a discrete transistor amplifier would be better.
>Look at Solid State Design for some hints. Also you should look at some
>input circuits from good homebrew receivers; the 10/18 MHz image IF
>receiver in recent handbooks has a good front end, as does the "Progressive
>Communications Receiver" by Hayward and/or DeMaw in recent handbooks (I
>don't know if it is in the 98 Handbook or not).

i'll need to find those. related question: i just saw some very low noise (2.1 and even 0.75 nV/sqrt(Hz)) video op-amps in a Maxim flyer. if i set the input resistor to the desired impedance, and set the gain for something like 4x voltage gain, is there any reason why i couldn't use one of these as the pre-amp device for the R2? how is the output impedance of an op-amp determined so i could match it to the next stage?

>You will need filtering before and after the amplifier. You should also
>look into providing some switchable attenuation, say 0, 6 dB, 12 dB in the
>front end to provide further improvement in strong signal rejection. This
>is an area which is often neglected in QRP receiver design, but the
>benefits can be great for a small investment.

is a resistor attenuation pad, the way to go, or some form of transformer
better in the way of noise?

>Keep us posted. It sounds like you have a neat project going there. -

credit is really due to KK7B, who designed the R2, as well as to all the
folks who have written about it. i'm just going along the path they
blazed. i've learned more studying this design, and asking questions on
this list (and Glen, VE3DNL; and several others), than from any other
source. Laura Halliday had suggested the R2 as the Elmer101 project, and i
can certainly see why, though i think it might be better as the 2nd
semester, Elmer201 project.

this list is GREAT!

72,
--adam, n2brt

```
=====
Adam B. Kanis, N2BRT
adam-kanis@uiowa.edu      QTH: Wellman, IA (Near Iowa City) EN41ck
  -- Straight Key : OHR-100 40m : Carolina Beam oriented N/S --
  --- ARRL : QRP-ARCI : GQRP : QRP-L : NorCal : CQC : SEITS ---
** On the web at http://genome33.ped-gen.uiowa.edu/hamradio **
=====
```

Date: Mon, 30 Mar 1998 11:40:14 -0800
From: LYN <designserv@ipass.net>
To: w5yr@swbell.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7199] Re: Tower Help please.
Message-ID: <351FF51E.3B223E7D@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

George T. Baker wrote:

> Just one thought: if you must obtain a permit before erecting the tower,
> many municipalities require an engineering analysis of the tower before
> granting a permit. Most of these are willing to accept the
> manufacturer's specifications for this.
>

Don't know what the percentage is, but our local inspectors
couldn't care less about the manufacturer's specifications --
they say that an engineer certified to do business in this state
has to put his signature on it, which means that he has to
get involved enough (and collect enough) to make taking the
risk worthwhile to him.

Lyn, W4WDN

Date: Mon, 30 Mar 1998 12:22:37 -0800
From: LYN <designserv@ipass.net>
To: rfg@acsu.buffalo.edu
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7200] Re: Grounding dipole
Message-ID: <351FFF0D.6C2E2539@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greg & Rosemarie Gryckiewicz wrote:

> Any tips on how to ground a dipole using ladder feedline???
> 73, Greg N2DYT

You might be intgerested in looking into the Lightning Arrestorfor 300 &
450 ohm balanced line, Wireman part # 878, priced
at \$19.95. It has two spark plugs mounted on a heavy copper
bar which has a large bolt which can be mounted to your
ground system. The insulated terminals of the spark plugs have
sets of copper straps -- one to be used for 300 ohm line and
one to be used for 450 ohm line -- to which the balanced line
can be connected.

I haven't done the math, but it seems to me that the plug gaps

should be properly set for different transmitter power levels. The bubble-wrapped package appears to have an instruction leaflet, but I haven't read it.

It also seems to me that it would be best to have BOTH something like this AND a dual knife switch. I would think that this should always be connected to the lead-in, and then a dual knife switch should be used to disconnect the rig and connect the antenna to ground. I say both because of the possibility that a surprise storm could come up while you are operating, or possibility you could accidentally forget to throw the knife switch.

Hope this helps

Lyn

Date: Mon, 30 Mar 1998 12:42:09 EST
From: B1ljohn <B1ljohn@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [7201] Grounding antennas
Message-ID: <2da5a6a3.351fd973@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

For what it is worth. An old friend in the TV business once told me he never had a tv antenna struck by lightening. His secret . . . he never grounded them. He said to do so provided a path. Something to keep in mind when dealing with bad weather. I certainly would not advocate keeping the equipment attached, but would not recommend using a knife switch to put the antenna to ground. Mother nature is looking for a path so don't give her one.

Bill

K9YEQ

Date: Mon, 30 Mar 1998 12:46:45 -0800
From: LYN <designserv@ipass.net>

To: rfg@acsu.buffalo.edu
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7202] Re: Grounding dipole
Message-ID: <352004B5.190C378A@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greg & Rosemarie Gryckiewicz wrote:

> Any tips on how to ground a dipole using ladder feedline???
> 73, Greg N2DYT

Oh, Wireman, Inc. also has a dual knife switch, PN # 847. The price when I saw it was \$7.95.

And the fact that a given TV antenna has never been struck by lightning certainly says nothing at all about the lightning expertise of the tv antenna salesman.

Lyn

Date: Mon, 30 Mar 1998 13:12:54 -0500
From: Ed Tanton <n4xy@att.net>
To: QRP-L Reflector <qrp-l@Lehigh.EDU>
Cc: "Theresa T. Tanton" <tantontt@mindspring.com>
Subject: [7203] Happy dance (WIN NT / WIN 98 / Internet Connections)
Message-ID: <3.0.1.32.19980330131254.00b0e730@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I KNOW this isn't related... but I have been trying to find this for almost a month... I wanted to switch providers from Bellsouth (who takes 4-5 tries to get in and drops 'carrier' 7-8 times over a day, unexpectedly and often in the middle of a 14M file xfer)) to AT&T who-so far-has been nearly flawless... BUT AT&T Tech Support doesn't want to even TALK about WIN NT... much less support it. I HAD been running both local ISP Avana and Bellsouth with no problems using NT 4.03... should be no problem adding another? Right? WRONG!

So, when I could dial in to ATT but somehow EUDORA PRO (mail), AGENT (newsgroups), and Netscape Navigator 4.04 NOR MS IE4 could not seem to

communicate through it once dialed and established, I have been working ever since.

I next installed WIN 98 (and I use System Commander to let me choose between DOS 6.22, WIN 98 (beta ver.), or WIN NT 4.03.) Running WIN 98 (let me recommend it highly, by the way-not a glitch here except minor sorting out with my Panasonic PD CD-R) I was able to establish connections with both Bellsouth and AT& T. I have been trying to find the error of my ways ever since-as far as what was happening-or, more correctly, NOT happening) with NT 4.

Finally, today after the loss of a substantial amount of sleep, and an ever-decreasing amount of hair pulled from their increasingly grey roots, I went through the "Connecting with the Internet" starting on p1023 of the WINDOWS NT Workstation Resource Kit Book ("If all else fails... RTDD"). A small phrase caught my eye several pages in... they mentioned that for a PPP setting BOTH the TCP/IP ** AND ** the NetBEUI protocols were to be selected. BINGO. I knew-or thought I knew-that NetBEUI was strictly a networking thing and not used for modem things. I thought I knew that, because one of the "F1" popup-help windows once again failed to tell the whole story. They tend, in WIN NT, to tell you the most important part of the tale... but not necessarily all.

Enabled NetBEUI, rebooted, and BONGO... I'm back in the saddle with WIN NT.

HAPPY!!! HAPPY!!! JOY!!! JOY!!!

Now, in case you are wondering why I care after getting WIN 98 up and running, I can say the following:

1) WIN 98 works VERY well. It is superior to WIN 95-perhaps vastly. It does NOT seem to have that isolation layer WIN NT 4 has... although I can think of only one or two times I believe whatever lockup occurred managed to also lock out the keyboard... otherwise, you were able to END TASK out of the locked program. WIN NT 4, in the couple of years (I think) I've been running it has NEVER done that... always providing you with that layer of protection. The layer MAY be there less obviously, than with NT, I don't know, and it's lack is not as significant as with '95, but I remain more comfortable with 'NT.

2) WIN 98 handles DOS stuff much better than I have been able to get NT to do it. Specifically games and such that want to directly access the hard drive. That layer I mentioned has a LOT of trouble with anything like that, and typically simply won't allow it period. Cudos to WIN 98 for DOS apps and especially games.

3) My favorite thing about NT 4 is the way it REALLY allows genuine multi-tasking the way WINDOWS originally promised it would. From everything

4) My second favorite thing about WIN NT 4 is its ability to parcel out memory from all that extra memory sitting there on the motherboard... it REALLY does that nicely... to the point that on my 128M P5-200 machine downstairs, you could literally tell it was achieving some sort of increase of efficiency when I went to 128MB from 64MB. It was just discernably faster.

73

INTERESTS:	QRP	BoatAnchors	Test Equipment	Photography
CW: 99.9%		Mercury Paddle # 0214		QRP to 150W: 95%

Date: Mon, 30 Mar 1998 13:14:39
From: Roger Braker <msebrakr@telepath.com>
To: qrp-l@Lehigh.EDU
Subject: [7204] elmer 101:parts list
Message-ID: <3.0.1.16.19980330131439.3b071b12@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Guys,
Is there a parts list for any where for the sw40? I'd like one so I know what some of the component values are. Also, someone said they had a list of what all the components in the rig did. Could the person who has it please send it to me? thanks.

73,
Arnol kd5ckh

Date: Mon, 30 Mar 1998 11:26:11 -0700
From: Brad Mugleston <bmug@gwl.com>
To: "'qrp-1'" <qrp-1@Lehigh.EDU>
Subject: [7205] New Question
Message-ID: <01BD5BCE.A5AFE2C0@pps-pc10.gwl.com>

Thanks for all the help on the T connector. I believe I will go with a coax switch (I don't know why I didn't think of that).

Next question:

I have two rigs, one is in the basement in my son's room and the other is in my room on the second floor - we are at opposite ends of the house.

Due to lack of realestate We have one G5RV at about 50' that feeds to my son's room. I've looked into feeding from his room to my room but was wondering if I could string a second G5RV or similar right next to the original and feed it to my room.

My son reached General then discovered girls so there is no chance that he will be on the air when I am so I don't need to worry about that. I just get tired going to his room to play radio and I don't want to take it out of his room in the hopes that some night he may get back on the air and rediscover the fun he use to have.

Thanks

de KB0ROL, Brad

Date: Mon, 30 Mar 1998 10:41:22 -0800 (PST)
From: "Allan G. Taylor" <ataylor@heracles.llnl.gov>
To: qrp-1@Lehigh.EDU, mgipe@reliablemeters.com
Cc: k7gt@qsl.net
Subject: [7206] DSPs: The great A/B test
Message-ID: <199803301841.KAA14823@heracles.llnl.gov>

I happened to be in a situation over this past weekend to do a serious A/B test of the two most highly regarded DSP boxes. They were the Timewave 599ZX and the JPS NIR-12. (courtesy of K1MG who didn't insist that I immediately ship the unit he just bought from me...)

Anyway, to the test.

I used the dual audio channel capability of the 599ZX to put the DSP of it in

its channel A and the output of the JPS NIR-12 in its channel B. Put on stereo headphones... (good ones, too) Here are my observations:

In the NR mode, 599ZX, and Dynamic Peaking mode, NIR-12, the results were essentially identical. Each had delay that could not be distinguished from the other. When I cranked in the NIR-12s NIR mode, the noise reduction advantage of the NIR-12 became apparent, but at a modest price. Since I was listening 'live', the 190 msec delay in its NIR mode was easily apparent. But the noise was gone. This test was done on 40 cw last Saturday evening and Sunday morning. Even cranking in the NIR mode partially on the NIR12 gave a noticeable nod to that box over the 599ZX. If I had completely done the installation of the NIR-12 in my station console, I would have had a PTT / Transmit connection to make the NIR-12 behave. As it was, sending code was impossible. Of course, copying code that is offset in time by .2 sec in opposing ears was a challenge as well. The delay just doesn't matter if one has it correctly installed, provided one can anticipate the end of transmission by .2 sec!

What is the down side? The NIR-12 has a pickier A/D converter. The level has to be fairly carefully set to give reasonable output. As the 599ZX has an AGC in its input line and also a less picky A/D converter, casual use was much more convenient with the 599ZX. Also the controls, centering tone on cw mode, and display were much friendlier on the 599ZX.

As setting the input level of the NIR-12 is more critical, I found that using it chasing DX in the low end tough to do: too much signal variation. But I would expect that for someone using it to dig out foxes, where most of the signals are about equally loud, and in any case no really big sigs on (have you ever been down the barrel from a kw / 3 el yagi on 40?), that it should shine there.

I am anxiously awaiting the next generation of DSPs where the commercial suppliers can merge their ideas into a superior product.

As I do much more work chasing DX down at the bottom than Foxes up on 7040, I will likely be putting the NIR-12 on the market soon. The 599ZX ultimately proved to be no help on those tough signals in the noise. I guess our grey filters are just too good. Too bad it fatigues, tho.

Sorry for those who couldn't gain from this note, but I thought the test to be of significance to the qrp gang.

Grant/K7GT k7gt@qsl.net

Date: Mon, 30 Mar 1998 12:45:04 -0600
From: jldougher <jldougher@wt.net>
To: QRP-L@Lehigh.EDU
Subject: [7207] CQ YV-OPS
Message-ID: <199803301845.MAA00110@pan.wt.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

By chance, any YV ops out there?

Am spending several months in Caracas, at Hotel Tamanaco
(porsupuesto). Would like to meet any local ops that might be watching this
list. Please contact J. Dougherty at hotel.

Atenatamente y 73,

WA8GHZ /yv

Date: Mon, 30 Mar 1998 18:48:06 +0100
From: "Steve Sorrell" <ap036@detroit.freenet.org>
To: <JGold@tntech.edu>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [7208] Re: Ten Tec Meter Kit
Message-ID: <007d01bd5c04\$009dad40\$b142b3c7@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Did you let TenTec know about your problems?

Date: Mon, 30 Mar 1998 13:41 -0700 (PDT)
From: eakwik@mail.hac.com
To: qrp-l@Lehigh.EDU
Subject: [7209] More Gel Cells
Message-ID: <0EQN00E17ARADV@mail.hac.com>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=ISO-8859-1

I am using my motorcycle battery to power my rig (Triton IV) but
spring is here and I need to return it to my bike so I can ride. What

sources are there for cheap gel cells and chargers?

Thanks & 72's

Ed Kwik KC8JIE Waterford, MI qrp-l# 1444

Date: Mon, 30 Mar 1998 19:00:01 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [7210] SW-40+ Schematic Update
Message-ID: <199803301900.TAA02145@chuck.dallas.sgi.com>

Gang,

On the web page, the Dave Benson SW-40+ schematics
have been updated in PostScript, .jpg, and .gif formats.

My personal thanks to Ted, K4MKX, who has caught more
errors and cosmetic features than anyone. Ted, thanks OM.
We do appreciate the work.

FYI

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 12:02:42 -0700
From: Wayne Glover <wayneg@ci.ogden.ut.us>
To: qrp-l@Lehigh.EDU
Subject: [7211] gel-cell chargers (Chuck Adams)
Message-ID: <351FEC52.5F20@ci.ogden.ut.us>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here is the home page for Power-Sonic. Just check the page for chargers
and you will find the PSC-12500-F that Chuck mentioned listed there.
Perhaps some folks on the list are interested what with all the interest
in charging gel cells.

Wayne WJ7H

Date: Mon, 30 Mar 1998 13:02:15 -0600
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: rfg@acsu.buffalo.edu
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [7212] Re: Grounding a Dipole
Message-ID: <351A2DFAE256D111883A0060B06B166253DDDA@s-il02-j.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Greg:

I can think of a couple of ways to ground a dipole while fed with parallel line. I assume you are doing this to bleed off static charges?

If you use a parallel tuned balanced antenna tuner, you can ground the center of the coil, as it is at a neutral point.

Another possibility is to use a pair of maybe 100,000 ohm resistors. They will slowly bleed off any static charge, but are such high impedance at rf that they won't affect the signal or the match.

If you are using an unbalanced tuner (C-L-C) with a current balun (bifilar wire on a ferrite core, rod or toroid), you could put the 100 K resistor across the feedline. This way, wire A is dc grounded through the balun to the tuner chassis. If you ground the tuner chassis, that gives you the ground. The wire B comes through the balun to the output capacitor of the tuner and can't see a ground path. The resistor will bleed the charge off wire B to wire A and thence to ground.

73, Bob N6WG and Ol' Kenwood

Date: Mon, 30 Mar 1998 12:07:03 -0700
From: Wayne Glover <wayneg@ci.ogden.ut.us>
To: qrp-l@Lehigh.EDU
Subject: [7213] [Fwd: gel-cell chargers (Chuck Adams)]
Message-ID: <351FED57.22B1@ci.ogden.ut.us>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----4BB1BFB4299"

This is a multi-part message in MIME format.

-----4BB1BFB4299

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Oops - fergot to include the url (Y'all can tell I don't do this much)
<http://www.power-sonic.com/> Sorry - Wayne

-----4BB1BFB4299

Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Message-ID: <351FEC52.5F20@ci.ogden.ut.us>
Date: Mon, 30 Mar 1998 12:02:42 -0700
From: Wayne Glover <wayneg@ci.ogden.ut.us>
Reply-To: wayneg@ci.ogden.ut.us
Organization: Ogden City Inspection Services
X-Mailer: Mozilla 3.0 (Win95; U)
MIME-Version: 1.0
To: qrp-1@lehigh.edu
Subject: gel-cell chargers (Chuck Adams)
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here is the home page for Power-Sonic. Just check the page for chargers and you will find the PSC-12500-F that Chuck mentioned listed there. Perhaps some folks on the list are interested what with all the interest in charging gel cells.

Wayne WJ7H

-----4BB1BFB4299--

Date: Mon, 30 Mar 1998 13:06:40 -0600
From: Kevin Muenzler--WB5RUE <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'B1ljohn@aol.com'" <B1ljohn@aol.com>
Subject: [7214] RE: Grounding antennas
Message-ID: <01BD5BDC.AE892C40@muenzlerk.uthscsa.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On B1ljohn@aol.com, B1ljohn wrote:

> For what it is worth. An old friend in the TV business once told me he never
> had a tv antenna struck by lightning. His secret . . . he never grounded
> them. He said to do so provided a path. Something to keep in mind when
> dealing with bad weather. I certainly would not advocate keeping the
> equipment attached, but would not recommend using a knife switch to put the
> antenna to ground. Mother nature is looking for a path so don't give her
> one.

>

> Bill

>

> K9YEQ

>

>

Well there's an old saying "the angels protect fools and ships named
Enterprise..."

Kevin, WB5RUE

Date: Mon, 30 Mar 1998 11:17:36 -0800 (PST)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Roger Braker <msebrakr@telepath.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7215] On FORTH (LONG, NON-QRP, Computer Programming)
Message-ID: <Pine.LNX.3.96.980330095121.9365A-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> What is the "Forth" programming language? Any web sites I can read about
> it? Thanks.

Forth is a programming language that is quite unlike anything you're
likely to have experienced before. For more information, do check out
<http://www.taygeta.com>, and <http://www.forth.org>. Also check out the
comp.lang.forth newsgroup as well.

For those who are eager to get a taste of it now, what follows is clearly
"off-topic." I apologize for wasted bandwidth, but the aforementioned web
sites, in my opinion, don't have a good "brief" introduction of Forth.

----- OFF TOPIC STUFF BELOW -----

Forth is an interpreter, a compiler, a systems-level programming
language, a scripting language, an operating system, and an application

programmers interface, all at once. It has a devastatingly sharp learning curve for those familiar with C and other higher level programming languages, but once you get used to it, you'll never want to go back. :)

Before I delve a bit more into Forth itself, let me also say that Forth was originally used for the control of radio telescopes, and the analysis of signals received (that is, "DSP" before the term hit 'fad' status). This was in the early 70s, so it's only natural that Forth have a FORTRAN-ish look to it (but it's anything BUT Fortran!). As such, it has a lot of potential for DSP uses in ham radio.

A Forth program consists of a series of space-delimited words. Period. No ifs, ands, ors, or buts. There's no special cases. EVERY word, including numbers, is considered to be an executable 'verb'.

Take, for instance, the following: 3 5 + .

The 'word' 3 causes Forth to push the literal value of 3 onto the "data stack." The 'word' 5 causes Forth to push the literal value of 5. So the data stack contains "3 5". Then the "+" word causes Forth to add the two values, resulting in 8. Both the 3 and 5 are "consumed", and replaced with "8". And '.' prints that number to the screen.

This is an extremely simple example of the Forth interpreter. You use the Forth interpreter to access the compiler, like so:

```
: Example-Word 3 5 + ;
```

The ":" is a word which causes the creation of a new word (in this case, "Example-Word"). "3", "5", and "+" are -compiled- into the word. How this is done depends entirely on the Forth compiler itself, or if the method of compilation has been modified (yes, you can dynamically change Forth within Forth). Finally ";" is executed, instead of compiled, because it is marked as an "immediate" word. This causes the compiler to produce code which causes a "return" to the calling word to be executed.

So, now we can simply enter:

```
Example-word
```

and the value "8" should appear on the stack.

Here is a more complicated example of Forth's "colon-definitions" (as they're called). Can you tell me what it does?

```
: Interpret ( string-address length -- )  
  ( Save current input buffer on the "Return stack" )  
  BufferSize @ >R
```

```

    BufferAddress @ >R
    >IN @ >R

    ( Set new input buffer parameters )
    BufferSize !    BufferAddress ! 0 >IN !

    ( Interpret until end of buffer is reached )
    BEGIN >IN @ BufferSize @ U< WHILE
        32 WORD FIND      ( Find space-delimited word )
        IF EXECUTE        ( If found, execute it now )
        ELSE COUNT >NUMBER D>S THEN ( Otherwise, it must be a number )
    REPEAT

    ( Restore previous input buffer settings. )
    R> >IN !    R> BufferAddress ! R> BufferSize !
;

```

Yes, folks, this is THE Forth interpreter. :) The compiler is almost identical (my compiler assumes direct-threaded code, not native binary; direct threaded code operates between 88% and 105% of native binary code, and it's much easier to compile, but requires a more intricate run-time environment to support):

```

: ON -1 SWAP ! ; ( Just so you know what's going on. :)
: OFF 0 SWAP ! ;

: [ ( Enters interpretation mode ) STATE OFF ; IMMEDIATE

: ] ( The name ']' has a history behind it, and it's useful. )
    STATE ON
    BEGIN STATE @ WHILE ( While we're still compiling... )
        >IN @ BufferSize @ U< IF ( If there's still input to go )
        32 WORD FIND
            ?DUP IF ( If word was found... )
            -1 = IF ( If word is immediate, execute it now. )
            EXECUTE
        ELSE
            COMPILE ( Otherwise, we compile it... :- )
        THEN
            ELSE
                COUNT >NUMBER D>S COMPILE-NUMERIC-LITERAL
            THEN
        ELSE
            REFILL ( Gets more input from input device )
        THEN
    REPEAT
;

```


Anyway, the reason [and] are named the way they are, is because of how they are used:

```
: Another-example word1 word2 [ some-test ] word3 word4 ;
```

Note that some-test is executed DURING compilation; it is not compiled into the code. This is very handy for conditional compilation features. Other than that, it's rarely used.

Note that, from the above, it's easy to see that Forth can be used to compile itself, not only on the same machine, but also for other processors. Simply redefine the COMPILE and COMPILE-NUMERIC-LITERAL (the latter is my own word, and is not part of ANSI Forth) words, and you have it. You will also need an assembler (also within Forth) to define primitives or high-speed words. For example (80386 or higher):

```
CODE ?DUP( EBX is the top of stack cache )
    EBX EBX OR,
    IFNZ,
        EBX PUSH,
    THEN,
    NXT,
;CODE
```

where NXT, is defined as follows:

```
: NXT, LODSD, EAX JMP, ;
```

Note that you typically cannot place high-level structures, like IF/THENs, in assembly language programs for other assemblers unless they have complicated macros (e.g., MASM). Forth makes it painless to extend the assembler or compiler, because of its open stack-based architecture.

If you could follow down here, you are able to follow whatever is on those web pages (URLs at top of this message).

If anyone wants to know anything more about Forth, feel free to ask me (e-mail preferred, since this is off topic; unless you can find a way to make it QRP related :-)).

```
=====
KC5TJA/6      |                               -| TEAM DOLPHIN |-
DM13          |                               Samuel A. Falvo II
QRP-L #1447   |                               Chief Architect and Project Founder
```

Date: Mon, 30 Mar 1998 19:27:15 GMT
From: mwattcpa@earthlink.net (Marty Watt)
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [7216] Re: Grounding antennas
Message-ID: <351ff03a.14713267@mail.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

On Mon, 30 Mar 1998 12:42:09 EST, B1ljohn <B1ljohn@aol.com> wrote:

>For what it is worth. An old friend in the TV business once told me he =
never
>had a tv antenna struck by lightening. His secret . . . he never =
grounded
>them. He said to do so provided a path. Something to keep in mind when
>dealing with bad weather. I certainly would not advocate keeping the
>equipment attached, but would not recommend using a knife switch to put =
the
>antenna to ground. Mother nature is looking for a path so don't give =
her
>one. =20

I suspect perhaps your friend was lucky, rather than particularly =
inventive
...

I was taught (by my elmer, no formal education) that lightning was the =
result
of a difference in potential between the charge at altitude and the =
charge
near earth. The differences in potential develop suddenly. Nothing can
change the charge at altitude, but we can impact the charge near earth.

Think of lightning rods. Most people believe lightning rods are placed =
to
"attract" lightning, away from other objects. But that isn't the case --
lightning rods were installed to equalize the charge between the =
ground/earth
and the nearby atmosphere, thus eliminating differences in potential to =
the
degree possible. Lightning rods actually deter lightning!

Same thing with antennas ... an antenna can act as a lightning rod, when
grounded, equalizing the charge between earth and the nearby atmosphere. =
It
is actually a better lightning "preventer" than a lightning rod. Most

publications speak of an "umbrella" of protection provided by tall metal structures, usually extending out at a 30 deg. angle from the peak. I = wonder if anyone has tried to bypass covenants and deed restrictions for = erection of an antenna by claiming it was a lightning protection system?

If I'm wrong, I gladly accept the counsel of the more learned elders and elmers on the list. This is a very interesting topic to me, because = safety to me is of paramount importance. I hate lightning ...

--

72 es 73 de Marty, KM7W

=46ranklin, Tennessee <http://home.earthlink.net/~mwattcpa> =
=20
NorCal #2031 -- ARCI #7514 -- QRP-L #0953 -- AK/QRP #098 -- Grid EM65

Date: Sat, 28 Mar 1998 18:58:08 -0600
From: Jay Bromley <w5jay@alltel.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7217] WQ4RP GO GETEM
Message-ID: <351D9CA0.2227AE4C@alltel.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The Boys at Core Banks, NC are loud in AR. tonight. Their at 14.060.6 at 0050 UTC. Randy is the operator at present and is doing a great job. He is also adjusting his speed to yours. Worked him with .9w but could have gone lower.

Go GETEM!!

73 de W5JAY

Date: Mon, 30 Mar 1998 13:54:21 -0600
From: Mike - W0TMW <crucis@sky.net>
To: slee@u.washington.edu
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7218] Re: Battery chargers

Message-ID: <351FF86D.FB5F0BD3@sky.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks for the Tip! I just ordered one for \$10.99! Got their last one in stock, too. Not a bad price.

Mike - WOTMW

S. Lee wrote:

>
> Tower Hobbies sells a wall wart for charging 12 volt batteries.
> It's stock number TOWP 1000. The label says the output is 12 VDC
> at 600 mA. We've used one in our household for the past 6 years
> to charge up 7 AH lead acid batteries. Works great and Tower Hobbies
> is in the mail order business (for those of us not able to attend the
> NorCal meeting). Tower Hobbies' website: <http://www.towerhobbies.com>
> Enjoy! de AB7HI, Stephen Lee, Federal Way, WA
> slee@u.washington.edu
>
> PS No SGC-2020 check-in during Saturday's NW-QRP Club net.

--

```
=====
Mike Watson, WOTMW           QCWA Mbr# 28651, MidContinent Chapter #35
Raymore, Missouri, USA      Grid: EM28st, ARS# 352, QRP-L# 1849
http://www.sky.net/~crucis  E-mail: crucis@sky.net
=====
```

Date: Mon, 30 Mar 1998 13:00:37 -0700
From: Larry East <w1hue@amsat.org>
To: qrp-l@Lehigh.EDU
Subject: [7219] RS Frequency Counter Wanted
Message-ID: <3.0.3.32.19980330130037.0094b100@eloi>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Does anyone live near a Radio Shack that still has one of those \$30 frequency counters in stock? (RS #22-305) If so, would you be willing to get one for me? All the RS stores in this area (SE Idaho) are sold out.

72, Larry W1HUE/7

Date: Mon, 30 Mar 1998 12:08:23 PST
From: "Ted Beach" <k4mkx@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [7220] SW40+ diagram
Message-ID: <19980330200824.10385.qmail@hotmail.com>
Content-Type: text/plain

Chuck is much too kind to me!!

I have been bugging him for several days now, indicating that perhaps what he posted to his webpage for schematics might just leave a bit to be desired.

All in all he did a great job. However, the basic problem [less a few typos, etc] is that his line weight is not great enough to do justice to any of the saved file formats! In several places '2' looks like Z, and in several places '3' looks like '9' --- not good! This is not only on my screen but also on various printed pages.

However, as Chuck says, this 'preview' is for information only -- wait until you get the +real schematic+ from Dave Benson. You'll appreciate the wait!

72/73 de Ted
K4MKX

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Mon, 30 Mar 1998 20:12:43 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [7221] FOXHUNT Scores to Follow
Message-ID: <199803302012.UAA02413@chuck.dallas.sgi.com>

Gang,

Well, it's officially over. The Fourth Annual QRP-L HF FOXHUNT (tm) is now history. For those that participate it's over before you

you know it. For those that don't, it's finally over. :-) ;-)
The General and up scores to follow immediately. Novice/Tech+
scores later tonight or early tomorrow.

All the scores are very good and a bunch of awesome operators in the
group, both foxii and hunters. Those that have been here since the
first round four years ago remember how slow things were to begin with.
Ahh, the good ole days.

Some of the reasons for this exercise are:

- a. get QRPers off the couch and on the air
- b. hone operating skills in pileups, code speed, RIT, ...
- c. test propagation and weather on 40M in the winter :-)
- d. check out gear under sometimes adverse conditions
- e. learn to use UTC
- f. generate traffic on QRP-L :-)
- g. generate more than 2,900 2xQRP exchanges that otherwise
would not be accomplished
- h. learn to fight QRM/QRN/....
-

There are no losers in this exercise. Variation in scores can
be attributed to propagation factors such as band going long/short/dead,
time zone differentials, workloads, travel, and many many other factors
too numerous to list. The scores are as accurate as I could get them
considering the amount of email, updates, and errors that could be
corrected and some eliminated and duplicated contacts. Since there
were no prizes all you get are bragging rights. :-) :-)

My personal thanks to the participation levels on the part of both the
foxes and the hunters. Who would or could have ever thought that such
an activity would become so large and take up so much time?

I am assuming that all mail addresses are correct at lookup@qrz.com.
You can check your address by sending email to lookup@qrz.com and
putting a line in the body with

lookup your_call

followed by the word end on the next line. Text can all be all
lowercase letters.

Here is a sample of what you get back from the email:

Subject: Callsign Lookup (Automatic Reply)

Thank you for using the QRZ callsign e-mail server.

Below is the information on the callsign(s) that you requested.

Callsign: K5FO
Name: CHARLES N ADAMS
Addr1: BOX 181150
Addr2: DALLAS TX 75218-8150
Country: USA
Class: Extra
Effective: 23 Jan 1998
Expires: 23 Jan 2008
Location: 32.844 N 96.701 W Dallas County
Email: adams@sgi.com
Home Page: <http://reality.sgi.com/adams>

* NOTE * * NOTE * * NOTE * * NOTE * * NOTE * * NOTE *

Please, those of you that want to volunteer to be a fox next year wait until September when I will make a general announcement for volunteers. In the meantime work on your code speed, operating skills, rig, and get the best antenna setup you can. The competition will be fierce for the few positions available. I am going to make an attempt to spread the duties to new people and uniform geographical distribution if possible.

* NOTE * * NOTE * * NOTE * * NOTE * * NOTE * * NOTE *

FYI

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 20:14:00 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [7222] 1998 FOXHUNT SCORES G/A/E
Message-ID: <199803302014.UAA02418@chuck.dallas.sgi.com>

FINAL 1997-1998 FOXHUNT SUMMARY SHEET
March 30, 1998

Fourth Annual QRP-L HF Foxhunt

Total Number of Q's = 2,910

FOX SCORES

CALL	NAME	STATE	# of Q's	
W5FN	Tim	TX	81 + 75 = 156	****
K1MG	Mike	CA	81 + 74 = 155	
N0UR	Jim	MN	69 + 84 = 153	
KA8OKH	Rich	KY	87 + 64 = 151	
N6WG	Bob	CA	69 + 74 = 143	
K0EVZ	Doc	MN	62 + 76 = 138	
W7QQQ	Jack	AZ	65 + 70 = 135	
NQ7K	Mike	AZ	65 + 66 = 131	
N9DD	Tom	IN	90 + 38 = 128	****
K50I	Tim	NM	69 + 54 = 123	
VE7CQK	Paul	Canada	57 + 63 = 120	
AE9K	Brian	WI	65 + 50 = 115	
KI7MN	Bob	AZ	56 + 57 = 113	
KS4L	Randy	AL	42 + 68 = 110	
KK6MC/5	Jim	NM	52 + 58 = 110	
K8CV	Walt	MI	59 + 49 = 108	
W2UX	Gary	SC	48 + 59 = 107	
AA1MY	Seab	CT	59 + 45 = 104	
W3CV	Scott	MD	49 + 52 = 102	
AB7TK	Randy	ID	64 + 34 = 98	
W03B	Bob	CA	42 + 55 = 97	
N0TFI	Jess	CO	58 + 35 = 93	
N2TNN	Dean	NJ	33 + 46 = 79	
N8VAR	Ron	OH	25 + 28 = 53	
NR3Z	Marty	PA	47 + 0 = 47	
AE4IC	Bob	VA	15 + 26 = 41	

+-----+
+
+ HUNTERS SCORES +
+
+-----+

NQ7X(47) K1MG(46) AB5UA(44) AB7TT(44) KU7Y(43) K10J(42) W5FN(42)

W0CH(40) WB0T(26) K0EVZ(37) KB0PTE(8) KB0ROL(7) W0CLR(6) N0HJ(9)
 K0SU(10) N0TFI(19) KB0ZDF(3) N0UR(11) K0CD KB0PI K0GJX(3)
 AA0ZZ(18) W00Q(6) W0RW(27) KM0II(3) W0HEP WM0Q K0FRP K0HUU
 KQ0I(7) WB0ROQ(2) WB0CLD(5) KR0I NF0R NI0A(12) KB0VIJ N0BS(5)
 W0KW WB0ATR(4) W0RSP(8) KI0KY(2) KI0II(4) AB0GO(6) W0DC N0TU(8)
 WB0CGH(2) KB0VCC N0EUM NG0M(4) W0OPW W0NBU AA0B NZ0T W00K
 N0UVR

K1MG(46) K10J(42) W1GM(3) AA1MY(6) N10CJ(3) N1QQV(17) KA1AXY WA1QVM(14)
 KC1FB(14) W1LP/MM(5) AK1P(9) N1FN K1CL(3) K1RA K1XS(3) W1HUE(3)
 N1TP(20) K1NY(3) KD1JV AA10F NT1R N1ODL KC1GB

K2VC0(32) W2UX(11) N2BRT AA2PF(10) W2PFS(9) N2TNN(5) N2TO K2VNM(8)
 N2VPK(9) K2SJB(7) WZ2T(4) WJ2V(2) AA2VK N2SMH(4) N2GO(7)
 KJ2V N2WF(7) WA2TDL N2APB(3) N2TSQ N2DBD KG2IM(4) WB2GAI
 KA2PQY KF2PH(5) AA2YK KV2X(2) W2JEK KG2H(3) W2MY KG2LO(4)

KJ3V(20) N3KFL N3XRV(9) KA3WMJ(9) KA3EAJ(8) W03B(15) WD3P(7) WV3J(5)
 N3YSI(7) N3NLT N3CEU W3PM(3) NR3Z(2) KT3A(2) KD3FG NF3I
 W3MWY(3) W3GEO KA3K(2) N3YRI W3PNL(2) N3JF NA3V(2) W3CD(3)
 K3XPV

N4ROA(31) WB4EXW(25) K4CGY(3) WA4CMI(3) N4DD AE4IC(10) KK4KF(4) KS4L(5)
 N4JS(7) N4UY(2) KC4MHM K4GT(6) K4WZ(4) N4DD N4SO(8) KU4AF(8)
 WS4S(2) WD4MSM(23) AE4GX(2) K4PYM(5) KS4HQ(3) AC4HF KU4LC N4PK(5)
 WA4DAI(4) N4KV(3) W4YNG(8) N4AC WA4HHP NZ4E N4CD AA4GA N4XDW(6)
 KD4OBQ(3) WF4I(2) NU4N WN4KZ KF4AR(2) K4PYW N4AN K4BES AE4MX
 W4PU

AB5UA(44) N5JI(40) W5FN(42) K5ZTY(39) KQ5U(33) K5JHP(37) W5TFB(19)
 K5ON(35) K5UP(30) N5LU(32) W5HNS(29) KK6MC/5(21) KK5X0(4)
 N5ALO(9) W5XE(5) K5FO(17) AA5CO(2) K5W0(6) W5JH K5TZY(2)
 W5ZH KC5AI W5MN(3) NA5K(6) W5JAY(5) W5SNS W5VB0(5) KC5AIK(2)
 K5AO W5SB(29) KA5T(31) K5JUC KK5KU KJ5VW K5OI(32) NA5N
 K5LE(6) WA5WHN(2) N5ZN(7) KE5TC(3) AF5Z(8) WA5YFY(2) K5NZ(6)
 K5ID(28) AC5IE(2) N5JKY(4) AA5TA(24) AC5II(3) K5VUU(19)
 KI5IB(2) W5USJ(5) K5GQ(7) N5PYB KC5FMZ KI5G(2) AC5JH(9) WA5SAJ
 WD5COV N5YUC W5QJM KK5NA N5TW(2) KK5U KC5RL WE5W W5YR(3) KW5OK
 KD5CMN(2)

N6XU(31) WE6W(31) N6WG(29) W6ZH(34) W6BAB(23) K6VNX(22) K06KA(19)
 W6SIY(6) WA6NAE(20) W6EMD(5) K6RPN AA6R(4) KF6CTA(11) W6SU(19)
 AC6KW(9) KN6YD(2) KI6OY(5) K6MW(3) WI6I W6EMT(7) N6VZ(14) WA6GER
 AD6AY(5) AC6LA(17) W6EV(3) N6GA(2) KD6VIO(3) WA6HHQ W6SV N6KR
 K6MR K6YR N6MM(20) W6KI(2) N6ZS K6UNX W6WU W6HIY N6LL
 NU6SN WB6MFS AD6CC KF6NEB

NQ7X(47) AB7TT(44) KU7Y(43) N7VE(38) W7QQQ(18) AB7TK(29) WW7Y(11)
AB7ST(11) N7CTJ(4) W7SSM(18) N7GS(20) NQ7K(11) KI7MN(26)
N7CQR(7) AB7MY(34) KJ7YN W7GVN(5) AB7OA(10) KG7PV N7KT(24)
KA7NOC(5) AB7GO WJ7H(2) W7JDZ(3) N7MFB(4) K7DBV N7XJW(23)
KA7OKH N7IR(20) WA7JEG W7UQ WA7SSA KB7MBI(2) N7IL AI7R KJ7BS
WD7Y KT7S KL7IXI/7 AB7CE

+

KA80KH(19) K8CV(15) KC8EPA WQ8RP W8KC(7) K8DD(7) KB8MCZ WD8KQY(2)
KB8AZ WA8GHZ(8) WB8E W8SFF(6) W8RU(10) WK8S N8ET(2) K8NWD(2)
N8CW(2) N8VAR(5) WB8NYV K8FF(3) W8RO NU8Z(5) W8IZZ(2)
N8VZU(3) NV8ZNU WA8VNZ K8KFJ WA8RXI(2)

+

NF9K(5) W9UQB(11) N9DD(21) KB9IUA(13) N9KW(16) W9KVF(5) WA9PWP(22)
AF9T(7) W9DZ NN9K WB9HFK(8) W9UQV AE9K(2) N9AW(2) WB9LKC(3)
N9WAQ K9IA AA9L(12) KB9GEG N9NW K9LJB KB9RXE WA9YLB KM9L

+

AL7FS(2)

+

KH6KQO

VE1MT(2) VE3ELA(19) VE3JC(10) VE3OU VE3SP(4) VE4CQ VE5RC(29) VE5WF(8)
VE6GK(3) VE6NJK(6) VE6EWM(4) VE7CQK(23) VE7CTN

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 20:30:46 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [7223] Hunter Count in FOXHUNT
Message-ID: <199803302030.UAA02534@chuck.dallas.sgi.com>

I just took the final file, copied it, stripped out the
scores and the foxes and I count 388 different calls.

That is some participation count!

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 14:35:25 -0000
From: "Steve" <steve@pell.net>
To: <qrp-1@Lehigh.EDU>
Subject: [7224] TenTec kits
Message-ID: <199803302034.PAA18244@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang

I am thinking about buying the Tentec 1340 kit Can any one give me the scoop on this kit?? This will be my first attempt at kit building!!
Thanks Steve Kb4pth

Date: Mon, 30 Mar 1998 14:33:39 -0600
From: Kevin Muenzler--WB5RUE <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'B1ljohn@aol.com'" <B1ljohn@aol.com>
Subject: [7225] RE: Grounding antennas
Message-ID: <01BD5BE8.DE5080C0@muenzlerk.uthscsa.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

.On B1ljohn@aol.com, B1ljohn wrote:

> For what it is worth. An old friend in the TV business once told me he never
> had a tv antenna struck by lightening. His secret . . . he never grounded
> them. He said to do so provided a path. Something to keep in mind when
> dealing with bad weather. I certainly would not advocate keeping the
> equipment attached, but would not recommend using a knife switch to put the
> antenna to ground. Mother nature is looking for a path so don't give her
> one.
>
> Bill
>
> K9YEQ
>
>

ooops, hit send button -- computers do exactly what you tell them to do....

Well there's an old saying "the angels protect fools and ships named Enterprise..."

Yes, mother nature is looking for a path -- if you don't give her an EASY one she will make one herself. She knows nothing about "Ohm's Law" and the principles behind conductor size and resistance. She simply finds/makes the first convenient path and takes it. If it is not sufficient to handle the hundreds of thousands of amps and damage WILL result.

I've seen lightning turn the house wiring into a path to ground.

#14 wire doesn't hold up very well to the high current. It vaporizes and causes the adjacent structure to catch fire. If it is in a conduit the conduit becomes the conductor. It also usually heats enough to catch the adjacent structure on fire or at least cause heat damage.

I've seen lightning turn the nails in a house structure into a path to ground.

I've seen lightning produce a nice geometric pattern down the walls of a house like a "connect the dots" puzzle jumping from nail to nail until it finds a good ground.

I've seen lightning turn the wood in the house into a path to ground.

This happens too often when lightning hits the corner of a house or an ungrounded chimney. It is almost guaranteed to cause a fire in a wooden structure. I've seen lightning hit the corner of the roof of a house that didn't have an antenna on it. So this throws the theory of "don't provide a path and the lightning will go elsewhere" right out the window. Wood is a poor conductor of electricity but if the EMF pressure is strong enough anything can become a conductor.

What happens when you pass lots of current through something ill-equipped to handle it? Lots of heat! Lightning splits trees because the heat generated in the high current/resistance combination by boiling the water in the wood. Lots of heat! I've even had a lightning strike boil all the water out of a newly poured tower slab. It powered the concrete so badly that I could scoop it out with my fingernails. It was just like chalk. The ARRL has an excellent right-up on lightning safety. It is a reprint of an old QST article. You can get it at <http://www.arrl.org/tis/info/lightnin.html>.

Kevin, WB5RUE

Date: Mon, 30 Mar 1998 19:44:13 +0100
From: John Anthony Reynolds <D2250077@infotrade.co.uk>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [7226] New Webb Page
Message-ID: <01BD5C16.F41821A0@default>

Hi all,

Have a look at my new Webb Pages on

<http://www.qsl.net/g3pto>

All comments would be appreciated, suggestions and criticism hopefully will help me improve the content.

The Site is devoted to Homebuilt Amateur Radio Equipment and CW, with a heavy bias towards QRP.

If you have a favourite circuit or project I will only be too pleased to include it on the relevant page.

73 de John G3PTO G QRP 595 QRP-1 1396

Date: Mon, 30 Mar 1998 16:04:12 -0500 (EST)
From: Kevin Bunin <p014455b@pb.seflin.org>
To: Kevin Muenzler--WB5RUE <wb5rue@stic.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7227] RE: Grounding antennas
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I think you ought to follow your friends advice. Call me after the lightning hits.

Kevin

-

Kevin Bunin
p014455b@pb.seflin.org

On Mon, 30 Mar 1998, Kevin Muenzler--WB5RUE wrote:

> .On Billjohn@aol.com, Billjohn wrote:
> > For what it is worth. An old friend in the TV business once told me he never
> > had a tv antenna struck by lightening. His secret . . . he never grounded
> > them. He said to do so provided a path. Something to keep in mind when
> > dealing with bad weather. I certainly would not advocate keeping the
> > equipment attached, but would not recommend using a knife switch to put the
> > antenna to ground. Mother nature is looking for a path so don't give her
> > one.
> >
> > Bill
> >
> > K9YEQ
> >
> >
>
>
> ooops, hit send button -- computers do exactly what you tell them to do....
>
> Well there's an old saying "the angels protect fools and ships named
Enterprise..."
>
>
> Yes, mother nature is looking for a path -- if you don't give her an EASY one
she
> will make one herself. She knows nothing about "Ohm's Law" and the principles
> behind conductor size and resistance. She simply finds/makes the first
convenient
> path and takes it. If it is not sufficient to handle the hundreds of thousands
> of amps and damage WILL result.
>
> I've seen lightning turn the house wiring into a path to ground.
>
> #14 wire doesn't hold up very well to the high current. It vaporizes
> and causes the adjacent structure to catch fire. If it is in a conduit
> the conduit becomes the conductor. It also usually heats enough to catch
> the adjacent structure on fire or at least cause heat damage.
>
> I've seen lightning turn the nails in a house structure into a path to ground.
>
> I've seen lightning produce a nice geometric pattern down the walls of a
> house like a "connect the dots" puzzle jumping from nail to nail until it
> finds a good ground.
>
> I've seen lightning turn the wood in the house into a path to ground.
>
> This happens too often when lightning hits the corner of a house or
> an ungrounded chimney. It is almost guaranteed to cause a fire in a

> wooden structure. I've seen lightning hit the corner of the roof of
> a house that didn't have an antenna on it. So this throws the theory
> of "don't provide a path and the lightning will go elsewhere" right
> out the window. Wood is a poor conductor of electricity but if the
> EMF pressure is strong enough anything can become a conductor.
>
> What happens when you pass lots of current through something ill-equipped to
> handle it? Lots of heat! Lightning splits trees because the heat generated
> in the high current/resistance combination by boiling the water in the wood.
> Lots of heat! I've even had a lightning strike boil all the water out of a
> newly poured tower slab. It powered the concrete so badly that I could
> scoop it out with my fingernails. It was just like chalk. The ARRL has
> an excellent right-up on lightning safety. It is a reprint of an old
> QST article. You can get it at <http://www.arrl.org/tis/info/lightnin.html>.
>
>
>
> Kevin, WB5RUE
>
>
>

Date: Mon, 30 Mar 1998 14:53:17 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@Lehigh.EDU, cqc@mtechnologies.com
Subject: [7228] New Product, Hi-Mound MK-8 Paddle (finally!)
Message-ID: <199803302154.0AA07803@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Milestone Technologies has finally received the first shipment of MK-8 Dual Paddles from Hi-Mound in Japan.

The stylish MK-8 features a small-footprint cylindrical base in heavy chrome-- it will stay where you put it! Contacts are gold-plated and every operation can be precisely adjusted to suit your sending style.

The plastic cover includes a nameplate which can be engraved with your callsign.

The MK-8 weighs almost 2-1/2 Lbs (1.1Kg). The diameter of the base is 3-3/16" and the height, with cover in place, is 2-1/2". The fingerpieces are close-spaced.

The MK-8 comes with a factory assembled, shielded, connecting cable--
just add the plug of your choice.

Images are on the web site at
<http://www.mtechnologies.com/hk.htm>
and you can use our secure credit card ordering
facilities, or call 800-238-8205 to order by phone.

73
Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...
<http://www.mtechnologies.com>
(303)752-3382
--

Date: Mon, 30 Mar 1998 16:06:06 -0600
From: Kevin Muenzler--WB5RUE <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,
"p014455b@pb.seflin.org" <p014455b@pb.seflin.org>
Subject: [7229] RE: Grounding antennas
Message-ID: <01BD5BF5.BF56E4E0@muenzlerk.uthscsa.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On p014455b@pb.seflin.org, Kevin Bunin[SMTP:p014455b@pb.seflin.org] wrote:
> I think you ought to follow your friends advice. Call me after the
> lightning hits.
>
> Kevin
>
> -
> Kevin Bunin
> p014455b@pb.seflin.org
>

I think that this is an attempt at an insult but I'm not sure.

I live on a hill 300 feet above average terrain. My antennas get hit
by lightning an average of ten (10) times a year. I have lightning
rods on the corners and peaks of the roof on my house. They are all

joined by #00 wire (1 inch solid copper.) They are grounded at four points along the parameter of my house. They get hit also and have actually been knocked loose from the mount by a direct strike. My television antenna is in the attic and is grounded also. You'd be amazed at the induced voltage by a close strike. I have trees around my house that are hit -- they have no lightning rods and are hit *ANYWAY*. I'd much rather have the lightning hit the lightning rod and be safely routed to the ground than hit my house and travel through it to get to ground. If you follow Bill's advice you might be rebuilding your house some day. Yes, the average house is rarely hit by lightning but then it might only take once to convince you. Even with all this I still disconnect all my rigs/TV/Stereo when I know of an approaching storm.

Kevin, WB5RUE
wb5rue@stic.net

Date: Mon, 30 Mar 1998 15:26:14 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@Lehigh.EDU, cqc@mtechnologies.com
Subject: [7230] MK8 Price (Forestalling Phone Calls)
Message-ID: <199803302227.PAA08695@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Yes, I neglected to include the price on the MK8 notice. I had some idea I might copy the announcement to a list that doesn't allow prices, you see, and didn't expect immediate phone calls [g].

The Hi-Mound MK8 is \$129.95 plus s/h which will be standard (\$5 USPS Priority Mail) or \$12.50 for Fedex 2nd day air.

73
Marshall Emm
N1FN/VK5FN
n1fn@mtechnologies.com
Milestone Technologies
Software, kits, tools...
<http://www.mtechnologies.com>
(303)752-3382

--

Date: Mon, 30 Mar 1998 17:31:33 EST
From: FrConrad <FrConrad@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [7231] Insulated Antenna Wires
Message-ID: <6c218dbe.35201d47@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

CQ QRPeople,

Not to detract from the scintillating discussion about lightening strikes...

But....

I getting ready to build a G5RV for portable operation. I've seen it said (mixed metaphor if I've ever written one) that insulated wire will work as well for an antenna as bare wire. This would be great because insulated wire is a lot easier to find and to handle. However, using an insulated antenna has a faint smell of "snipe hunt" about it. Are you sure it will work?

All opinions welcome.

Also, what about wire diameter (guage) and stranded vs solid?

Tnx es 72,

John+
WB6MFS

Date: Mon, 30 Mar 1998 22:35:16 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: mgemm@mtechnologies.com
Cc: qrp-1@Lehigh.EDU
Subject: [7232] Re: MK8 Price (Forestalling Phone Calls)
Message-ID: <199803302235.WAA03043@chuck.dallas.sgi.com>

Marshall et.al.,

Anyone that posts announcements of new QRP related items should and are encouraged to include pricing. Heck, how else are we gonna know immediately whether to pursue any further the idea of maybe going after one? :-)

The only thing that I and the rest of the crowd ask is that such posts from commercial vendors and constant for profit or supplemental income postings be kept to only once per month or so. Too frequent postings tend to become a bother to many and become treated like the calls on the home phone for telemarketing of products. :-)

Moderation is the keyword for commercial classifications. And hopefully for products immediately available off the shelf.

FYI and thanks,

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 15:33:29 -0700
From: Brad Mugleston <bmug@gw1.com>
To: "'qrp-l'" <qrp-l@Lehigh.EDU>
Subject: [7233] Elmer101
Message-ID: <01BD5BF1.31576920@pps-pc10.gw1.com>

I belong to the Colorado QRP Club and we are always looking for great things to put in our publication, the LowDown. I don't know if this has been asked, but does anyone have any problems with someone (me) condensing/compiling/editing the training we are about to receive and providing it for a clubs publication?

If this is OK, how does one give credit to those who are quoted (plagiarized)? Would a blanket statement crediting the participants of the QRP-L suffice? We have a lot of members who are not computerized that could benefit from what we are about to learn. Plus, our publisher would love to have the article.

Thanks,

de KB0ROL, Brad

Date: Mon, 30 Mar 1998 16:39:00 -0600
From: "Tim, KD5CKP" <Prog922@worldnet.att.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7234] Re: Insulated Antenna Wires
Message-ID: <35201F04.7804@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

FrConrad wrote:

>
> CQ QRPeople,
>
> Not to detract from the scintillating discussion about lightening strikes...
>
> But....
>
> I getting ready to build a G5RV for portable operation. I've seen it said
> (mixed metaphor if I've ever written one) that insulated wire will work as
> well for an antenna as bare wire. This would be great because insulated wire
> is a lot easier to find and to handle. However, using an insulated antenna
> has a faint smell of "snipe hunt" about it. Are you sure it will work?
>
> All opinions welcome.
>
> Also, what about wire diameter (guage) and stranded vs solid?
>
> Tnx es 72,
>
> John+
> WB6MFS

Good question. I am listening also please include me in the replies.

73
Tim
--

Tim, KD5CKP QRP-L #1510 <http://home.att.net/~prog922>

Date: Mon, 30 Mar 1998 15:53:07 -0500
From: "Buck, Preston D" <BuckPD@corning.com>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [7235] Ant question: 40m dipole fed w/ twin lead won't tune
Message-ID: <6B137F61081DD0118DF600805FEAC5C5FF203E@SILVER.CORNING.COM>
Content-Return: allowed
Mime-Version: 1.0
Content-Type: text/plain

Greetings all,

This weekend I built a half wave 40m dipole that is fed with RS 300 ohm twin lead that I couldn't tune up at all with my MFJ-1941E tuner. I couldn't get SWR below 5:1 and could barely make the needles move at all.

I disconnected the twin lead and connected a RG-58 coax and pruned it to 7.04MHz with no problem, then used the tuner to check it on other bands. Works FB even at 100w.

The antenna is intended to be a stealth antenna. It uses about 33 ft of black insulated 22ga copper wire. The kite string holding it temporarily was more visible than the wire itself. The twin lead was 50ft long. I chose this particular twin lead because it is small and is brown, perfect for running down the side of a tree. I plan to bury it a couple of inches at the base of the tree to run it into the house. I prefer twin lead over coax to reduce transmission line losses.

What did I miss here? My references (ARRL handbook, etc) say that twin lead doesn't need a balun at the antenna and that feed line length doesn't matter with twin lead.

Could my tuner be the culprit? Am I correct in thinking that I would need a 6:1 balun to convert from the twin lead to coax?

Inquiring minds want to know.

73

Preston, n0glm/aa, Southern NY State

My words, not my employer's

Date: Mon, 30 Mar 1998 17:46:17 EST
From: FrConrad <FrConrad@aol.com>

To: qrp-1@Lehigh.EDU
Subject: [7236] Delving the Degree of Dit Dropping
Message-ID: <a05324ef.352020ba@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

CQ,

Oh, yeah. I forgot to ask on my last post...

I'm thinking about building a NorCal paddle kit and I wonder how severe the dit-dropping problem is. Seems like there a whole lot of the kits out there with only a few squawks.

Is it peculiar to certain keyers?

How fast do you have to be going for it to happen?

etc.

At the speed I send, I suspect that my dits are longer than a lot of your dahs, ergo, it may not be a problem for me.

Any help?

John+
WB6MFS

Date: Mon, 30 Mar 1998 15:54:56 -0600 (CST)
From: cjsterl@ix.netcom.com
To: qrp-1@Lehigh.EDU
Subject: [7237] QRP DX OBSERVATION
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Greetings,

I find it's becoming MORE DIFFICULT catching DX now that the sunspots have somewhat returned! Isn't that nutz!

Since becoming licensed in March of 1995 I have enjoyed chasing DX. I actually may be one of the few "newbies" that actually started out QRP. We all know how for the past few years we have been at the bottom of the sunspot barrell. While chasing DX at QRP power levels has been challenging,

it hasn't been as difficult as one would think ... DXCC/WAS/WAC. I only have a dipole & what I would consider a very modest station.

I wonder why I'm finding QRP DXing more difficult now ... especially considering the increase in solar activity. Is it because there are more stations vying for the DX and the bands are noisier with more signals and more QRN/QRM? I know my station is more efficient now than in the past!

What gives? Any thoughts from any of the OTs out there?

72 de Craig/AA3MD

Date: Mon, 30 Mar 1998 17:54:34 -0500 (EST)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: FrConrad <FrConrad@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7238] Re: Insulated Antenna Wires
Message-ID: <Pine.GSO.3.96.980330174852.6036D-100000@larry>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

John,

Yes, indeed, insulated wire will work. Insulation is transparent to RF in the generation of the field. Its only effect is to slightly shorten the antenna relative to a bare wire version. Shortening is in the range of about 1-4%, depending on the insulating material and its thickness. For dipoles and other wire antennas with "open" ends, it is not necessary to remove the insulation and solder the back wrap: just back wrap with the insulation in place if you desire and can make it strong enough around the end insulator. The wire wrap at the out ends of a 1/2 wl antenna are ineffectual as inductors and hence do not load the antenna. There are many, many insulated wire antennas in operation, and nothing has ever established that they work any less well than their bare wire counterparts.

Hope this helps.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off)	(423)	974-7215
1434 High Mesa Drive	/	\	\	----	/	---	(Hm)	(423)	938-6335

Knoxville, Tennessee /\ \ \ \ / / || / (FAX) (423) 974-3509
37938-4443 USA / \ \ \ || cebik@utk.edu
URL: <http://funnelweb.utcc.utk.edu/~cebik/radio.html>

Date: Mon, 30 Mar 1998 15:30:43 -0600
From: ab5uacw@juno.com (Clifton W Sikes)
To: qrp-1@Lehigh.EDU
Subject: [7239] 1998 Fox Scores
Message-ID: <19980330.154136.6734.2.ab5uacw@juno.com>

Wow!!! That was quite a ride. Congrats to all who participated. Floyd, my hat is off to you, sir. For the second year in a row, you have set the standard of excellence. A great big attaboy!!

Thanks for the fun,

Clif

Clifton Sikes AB5UA QRP-L #478
Earlsboro, Ok.
ab5uacw@juno.com

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 30 Mar 1998 22:59:12 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [7240] NN1G, WJ2V, and K5FO SW-40+
Message-ID: <199803302259.WAA03247@chuck.dallas.sgi.com>

Gang,

The new Elmer101 rig, the SW-40+ from Small Wonder Labs owned and operated by Dave Benson NN1G, is currently in operation at three locations. Said locations are in the states of CT, NY, and TX.

So for a test run, NN1G, WJ2V, and K5FO at 0200-0300 UTC April 1, 1998 will simultaneously find three separate frequencies on 40M between 7.030 and 7.045MHz and call CQ and see what happens. There is nothing significant about the date.

This is a for fun one hour run, although if time permits and propagation is favorable, the time may be flexible by one or more of the three.

So, Tuesday night (tomorrow) is the night to try to work all three SW-40+s, serial numbers #1 (NN1G), #2 (WJ2V) and #3 (K5FO). :-) No, the rigs are not numbered, it just makes things interesting.

My guess is, that in order to make the largest number of contacts possible, should we consider an exchange of RST, Name, and State? Somewhere between a DX contact during a pileup of only an RST report and shorter than the SS or FOXHUNT exchange? This is not a contest, so relax and don't put the pressure on us.

Dave and Preston were kind enough to volunteer to do this as an interesting exercise. Let's hope that Dave got his 40M antenna up and ready. Also he will most likely be at the lower frequencies as ARRL starts up code practice about the time Dave picked. :-) Guess he wants to test the front end of the receiver. ;-)

So, set aside some time tomorrow night if you can spare it.

I hope I make today's digest.

dit dit es c u there
Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 30 Mar 1998 17:03:38 -0600

From: Kevin Muenzler--WB5RUE <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>,
"Prog922@worldnet.att.net" <Prog922@worldnet.att.net>
Subject: [7241] RE: Insulated Antenna Wires
Message-ID: <01BD5BFD.FE323A40@muenzlerk.uthscsa.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On Prog922@worldnet.att.net, Tim, KD5CKP[SMTP:Prog922@worldnet.att.net] wrote:

> FrConrad wrote:
> >
> > CQ QRPeople,
> >
> > Not to detract from the scintillating discussion about lightening strikes...
> >
> > But....
> >
> > I getting ready to build a G5RV for portable operation. I've seen it said
> > (mixed metaphor if I've ever written one) that insulated wire will work as
> > well for an antenna as bare wire. This would be great because insulated wire
> > is a lot easier to find and to handle. However, using an insulated antenna
> > has a faint smell of "snipe hunt" about it. Are you sure it will work?
> >
> > All opinions welcome.
> >
> > Also, what about wire diameter (guage) and stranded vs solid?
> >
> > Tnx es 72,
> >
> > John+
> > WB6MFS
>
> Good question. I am listening also please include me in the replies.
>
> 73
> Tim
> --
> Tim, KD5CKP QRP-L #1510 <http://home.att.net/~prog922>
>
>

The main disadvantage (only real one) with insulated wire is that it weighs more than bare wire. I wouldn't put up an antenna with stranded-bare wire, if there is such a thing. Insulated wire might last a bit longer than bare wire but not significantly longer unless you live in a salty environment. The dielectric properties of the insulation will cause the antenna to be a different length than a

bare wire one but at HF the difference is insignificant. As far as gauge size goes -- #14 stranded is the same size as #14 solid.

Kevin

Date: Mon, 30 Mar 1998 18:05:18 -0500 (EST)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: "Buck, Preston D" <BuckPD@corning.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7242] Re: Ant question: 40m dipole fed w/ twin lead won't tune
Message-ID: <Pine.GS0.3.96.980330175606.6036E-1000000@larry>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Preston,

Your description of the twin lead suggests that you may have had it in contact with either or both the tree and the ground. Twin lead is a balanced line and requires spacing from objects so as not to disturb the balance. Otherwise, it will no longer have a constant impedance along its length and may couple unpredictably into whatever it is proximity to.

The first step in checking this out is to run the twin lead free and clear to the ATU, which I assume has an internal balun. The straight line is not an absolute requirement, since one can use spacers to keep the line away from potentially unbalancing objects.

The line length might also play a role in the problem, but I have not checked this out. You do not need a 6:1 balun, because the impedance along the line is constantly changing due to the difference between the actual antenna impedance and the line impedance. Only if both the line and the antenna have the same impedance is the impedance constant along the line. The difference does not affect the antenna's ability to receive and convert power from electrical energy into electro-magnetic radiation. The impedance of the line at the point of connection to your ATU does play a role in whether the tuner variable components have sufficient range to effect a match. Once you have insured that the line is not improperly coupling to sundry objects, you can experiment with adding sections of line of various length to see what happens to your ability to effect a match.

Hope this is useful to you.

L. B. Cebik, W4RNL / \ / \ * / / / (Off) (423) 974-7215
1434 High Mesa Drive / \ / \ / ---- / \ ---- (Hm) (423) 938-6335
Knoxville, Tennessee / \ \ \ / / || / (FAX) (423) 974-3509
37938-4443 USA / \ \ \ || cebik@utk.edu

QRP/ARCI 2572 G-QRP 7203 CQC 125 NEQRP 347 NORCAL 1111 MIQRP 1432
NWQRP 401 ARRL Life: Technical & Educational Advisor 10-10 41159
QCWA 13211 scQRP 28 AK/QRP 343 CW Ops QRP Club (VK) 476 FISTS 2600
<http://funnelweb.utcc.utk.edu/~cebik/radio.html>

Hello All,
I'm really trying to work some QRP with my New (to me) TT Argo 556. I can really hear alot of stations but can't seem to work anyone. I did make a contact with another Knoxville Ham on 15 meters and that was alot of fun.
My biggest problem is I can only have Indoor Antennas. Right now all I have is a 15 meter dipole strung across the room kinda like below.

```

      \                Feed                /
      \-----+-----/
              15 foot run here then about 3.5 feet angled around the corner of
the wall on
each side.  feed is 50~coax.
What I was wanting to ask what is the best antenna for me with the space and
5 watts that
I have.  Here is what I can use in the space above the upstairs rooms.
|-----[30 feet]-----| _
+-----+

```

```

|
|
|
| 12
|      Bricks in middle of space old fireplace      | feet width
|
|              +---+
|
|              |___|
|
|
|
|
|
|

```

```

+-----+ _
{not to scale}
Well that's it.  I have alot of #12 solid wire to use and was thinking of
just putting up
a 40 meter dipole in kind of a loop, and using tuner to work other bands.
But just wanted
to put it out and see if anyone had any better suggestions for me to use in
this small
amout of space I have to use.
Also, anyone tell me if it's worth looking into something like the MFJ Super
Hi-Q Loop,
MFJ Box Fan Portable Loop or the MFJ Portable Antenna #1621  Those 3 sound
really great
in the add but hmm so do alot of things...
Thanks for any help/suggestions offered.
72,
de
Jim  -- KC4SMH
fielden@utkux.utcc.utk.edu

```

```

-----

Date: Mon, 30 Mar 1998 18:17:31
From: Roger Braker <msebrakr@telepath.com>
To: qrp-l@Lehigh.EDU
Subject: [7244] Please help
Message-ID: <3.0.1.16.19980330181731.3b0769ae@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

```

Hi guys,
I have been trying unsuccesfully to make a contact with my ugly weekender.

I think I have called or answered cq at least 50 times(or at least it seems that way). I have tried different calling speeds, the number of cq's, adding QRP to the end of the call but to no avail. I've tried skipping the antenna tuner and going just the antenna, tried it with the tuner. I've tried calling at nearly all times of day(except in the middle of the night:-). I'm pretty sure my TX/RX offset is OK but I can't tell real well with the analog dial on my Galaxy V and my frequency counter is this doesn't have that good of resolution.(it came on a \$40 DMM from elenco) Is there something I am doing wrong? Any suggestion would be more than welcome. This surely can't be what you guys go through for every contact:-).

73,
Arnold kd5ckh

Date: Mon, 30 Mar 1998 15:34:39 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: <cjsterl@ix.netcom.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [7245] Re: QRP DX OBSERVATION
Message-ID: <01bd5c34\$6822ae40\$309f5ecf@double_trouble.reliablemeters.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Craig --

The second hundred is ALWAYS more difficult than the first hundred.

Mike K1MG

>...I wonder why I'm finding QRP DXing more difficult now ... especially ...

Date: Mon, 30 Mar 1998 15:49:17 -0800 (PST)
From: talljazz@teleport.com (Dan Presley)
To: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
Cc: qrp-1@Lehigh.EDU

Subject: [7246] Re: Pblm with Sierra 15m module...
Message-ID: <v01530500b145702ca6bc@[204.202.160.112]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Check to see if you have a J309 or 310 for Q5; also, if you have D11 & 12 on the board, then make the mod. The other part I forgot was to install a ferrite bead on the base lead of Q6, the 2n2222a driver. This will eliminate the parasitics which may cause you trouble on 17,15 and above with tuning up the band modules. My Sierra was '96 vintage, and needed these mods. Everything worked great after doing them. Good luck
Dan N7CQR

Date: Mon, 30 Mar 1998 15:59:14 -0800 (PST)
From: Monte Stark <ku7y@dri.edu>
To: cjsterl@ix.netcom.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7247] Re: QRP DX OBSERVATION
Message-ID: <Pine.SOL.3.96.980330154138.23723A-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Crag,

The more you get the harder they are to get.

The first 100 can be done in a contest or two. The next 100 take more time.

The third 100 makes you start to think about using some bad words now and then!

The last few? I don't know..... I'm not there yet!

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

End of QRP-L Digest 1045
